



VOL. XIX.

PLATE I.





FIG. 1.



FIG. 2.

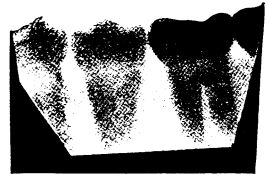


FIG. 3.



FIG. 4.



An X Ray Picture of the Living Human Head.

BY WILLIAM JAMES MORTON, M.D., New York City.

To those actually familiar, in practice, with the fluoroscopic and photographic revelations of the Roëntgen ray, the exhibit is still a source of never failing wonder and admiration. But the public mind, fed by the sensationalism of the daily press, and satisfied to substitute its own imaginative processes of what might be, for what really is, expects of the X ray, revelations of the human interior not yet nor probably ever attainable. We all recollect how during the period of the early announcement of Roëntgen's discovery, statements were made and pictures exhibited, purporting to show the structure of the brain, its veins and arteries, its convolutions, greater centers, etc.

These results I have never been able to repeat nor substantiate. And since negative evidence, on the basis of diagnosis by elimination, is often quite as valuable as affirmative, I reproduce in these pages an X ray picture of the living human skull which, as I believe, represents the highest perfection of actual accomplishment yet recorded. This picture is chiefly remarkable, so far as it relates to the topographical and structural anatomy of the brain, for what it does not show. (Plate I.)

The subject was a boy of twelve and one half years of age. I took the picture at the request of his parents, to see if any cause could be disclosed for frequent attacks of the epileptic *petit mal*. The usual focus tube was employed, and according to my usual custom was placed at a distance of two feet from the sensitive photographic plate. The duration of the exposure was fifteen minutes. An inspection of the print shows that the X ray passed abundantly and freely through the head to the plate. The flesh and bones of the face indeed seem to have exerted scarcely an appreciable obstacle to its passage. In the present case a piece of depressed bone was suspected, but it is reasonably positive that no such depression

exists. It is certain, however, that the convolutions of the brain, and their specific relation to their envelope of bone, have left behind them upon the plate a fairly definite record. This record I will not here attempt to interpret. Further similar pictures will be required to corroborate the localizations here evident. Fascinating as such a field of exploration may be to the neurologist, it is, however, as has been said, very different from the false X ray pictures of the brain, heretofore represented, and I am not without hopes that the X ray, still in its very infancy, may yet prove to be of inestimable value in brain as well as in other surgery.

If we turn from the skull contents to the facial region of the head, we find some points which may prove of real interest to dental surgery. These points are both affirmative and negative. Affirmatively, the existence and position of certain teeth not visible to the eye by ordinary inspection, are made clear, and their stage of development is disclosed. Negatively, we are assured (by comparison of this print with other prints of the normal skull) that no deviations, malformations or abnormal osseous growths, dental or otherwise exist.

Dr. Ottolengui, who was quick to appreciate the dental features of this X ray picture, has kindly consented to make the interpretation, and to him I cheerfully leave this branch of the subject.

**The X Ray
Not Necessarily
Dangerous.**

In conclusion I can hardly refrain from alluding to the great injustice which is now being done to legitimate X ray work by those who cause severe burns and injuries to patients. This is wholly unnecessary and entirely due to lack of skill and knowledge. So great has been the impetus to investigate Roëntgen's discovery, that a mass of inefficient apparatus has been placed in inefficient hands. The burns, necrosis of the derma and depilation recorded are invariably due to long exposures, or nearness of the patient to the tube—because of a weak and inefficient X ray. Never in my experience, and I have continuously taken X ray pictures of every sort since the first announcement more than a year ago, have I seen the slightest injury to a tissue result. This I believe to be due to the fact that I have used a powerful X ray and have thus been enabled to place my Crooke's tube at a considerable distance from the patient. My minimum distance for any work has been eighteen inches, my average distance, from two to three feet, and I have recently taken a picture of the entire adult figure showing the skeletal bones, at a distance of four and one-half feet.

These remarks I make, not to take any credit to myself, but rather to aid others to seek the right path, and thus avoid casting an unnecessary and undeserved opprobrium upon this new and marvelous addition to our means of diagnosis.

**The Dental
Features of the
Sciagraph.**

Dr. Morton having very kindly presented this most interesting picture and article for publication, I am only too willing to interpret the dental aspect of the picture. Being desirous of presenting the whole skull, it was necessary to reduce the photograph in reproducing it, as the print was of life size. In order therefore to bring out more clearly the details of the mouth parts, a second picture has been made, showing that region in full size. (Plate II.)

The first features which will attract the attention of the dentist are the two triangular sharp pointed projections in the fore part of the jaws. At first one might imagine that we have here some one of the lower animals, heretofore unknown, armed with terribly powerful mandibles, which would place the creature half way between the elephant and man. But the subject was a very mild mannered human child, endowed with no oral armament beyond normal. The explanation of the triangular shadows is that the Crooke's tube being necessarily at the side of the head, we obtain a profile view. Consequently, remembering the curve of the jaws anteriorly, and the narrowing at that part, we find that the shadows of the teeth on both sides of the jaw are thrown upon the film. Thus the projections are the composite shadows of the teeth and bone of both sides of the jaw, the hypotenuse of the triangle being made sharply distinct by the progressive absorption of the teeth posteriorly.

To be more explicit, the sharper part of the triangular shadow in the upper jaw includes the two central and the two lateral incisors, while the base of the shadow includes the cusp of the forming cuspid, plainly visible in the film, though not so distinct in the illustration. In the lower jaw, the triangle is somewhat differently produced. We have a deeper shadow from the process because it is thrown by the bone of both sides, and the upper edge of the triangle is outlined because the thin roots of these young incisors, largely filled with pulp tissue, and not yet of full length, have not resisted the passage of the light, so that the crowns appear, with the roots almost unindicated. The cuspid is seen faintly rising from the shadow, but is not yet sufficiently calcified to cast a deep shadow. The bicuspid, however, which must appear at an earlier day are more developed, and are plainly outlined, the resorption of the roots of the temporary molars being beautifully shown, especially the posterior root of the second temporary molar, which, as usual, is more resistant. A point of great interest here is the distinct space shown between the erupting bicuspid and their predecessors, the temporary molars. This proves that the resorption of the roots of the temporary teeth is not due to an irritation caused by actual contact or abrasion, but rather that the resorption being a physiological

expectation, a thick layer of odontoclasts are normally present and at work decalcifying the roots.

Another interesting feature of the picture is the condition of the twelfth year molars, still in the bone, but with scarcely any roots, the third molars casting no shadows at all, being at this age still a pulp mass.

The faint shadow below is the outline of the opposite inferior maxilla, which has been impressed upon the plate because the head was slightly tipped towards the X ray, which it must be remembered was on the side opposite to that which is distinctly shown—thus the jaw bone nearest the light is but slightly depicted.

R. OTTOLENGUI.

Diagnosis With the Roentgen Ray.

BY H. C. MCBRIAR, D. D. S., Middletown, N. Y.

That the sciagraph, or photograph taken with the Roëntgen ray is destined to be of service to the dentist as well as to the general surgeon, is amply proven by the following cases from my practice. Both of these patients suffered with neuralgia, that ailment which converts so many into human shuttlecocks, to be referred from physician to dentist, and from dentist back to the doctor.

In the first case, the sciagraph gave a negative result which, however, was of value because it was thus ascertained that the pains were not of dental origin. The teeth were all perfect and unquestionably in a healthy condition. But the origin of the pain seemed to indicate that there might be an impacted wisdom tooth. The sciagraph, however, dispelled this theory, no sign of a wisdom tooth being evident. (Plate III. Fig. 1.)

In the second case the neuralgia was equally severe and mysterious. A sciagraph was made and disclosed the presence of pulp nodules, or secondary dentine formations, in the root of the lateral incisor, at the point marked in the picture (Plate III. Fig. 2), the upper half of the canal showing clear, and thus indicating the presence of live, soft tissue only. The canal of the cuspid is shown to be clear throughout, while a root filling in the molar shows a dark shadow. All of these details are much clearer in the films than in the photograph (or half tone reproduction) because in the former we have a chance to examine the picture with transmitted light.

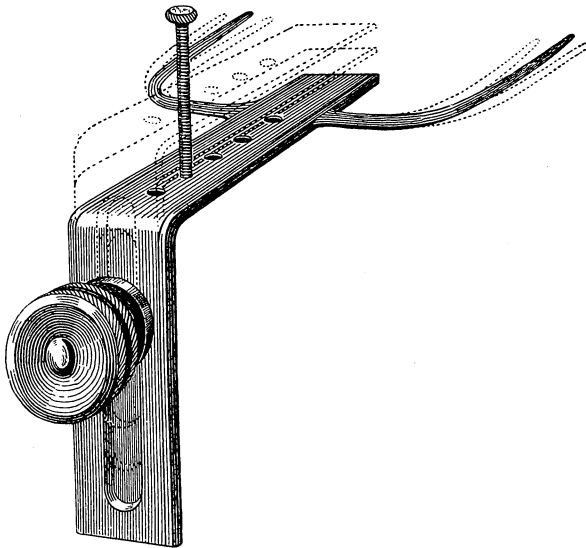
The pulp of this tooth being removed the neuralgia disappeared. Without the sciagraph there would have been no more reason for opening the lateral incisor than for so treating either of the adjacent teeth.

Taking the Bite.

By C. J. PETERSON. D.D.S., Dubuque, Ia.

It is an old saying that some people "bite off more than they can chew." It may be true in the present instance, for I purpose to run counter to the old and time-honored custom of making wax plates, in order to take the bite. I believe it to be unnecessary in a large majority of cases and a waste of time.

The real and only test of an artistic denture, as well as the final one, is to try it in the mouth when the teeth are set up; then, and then only,

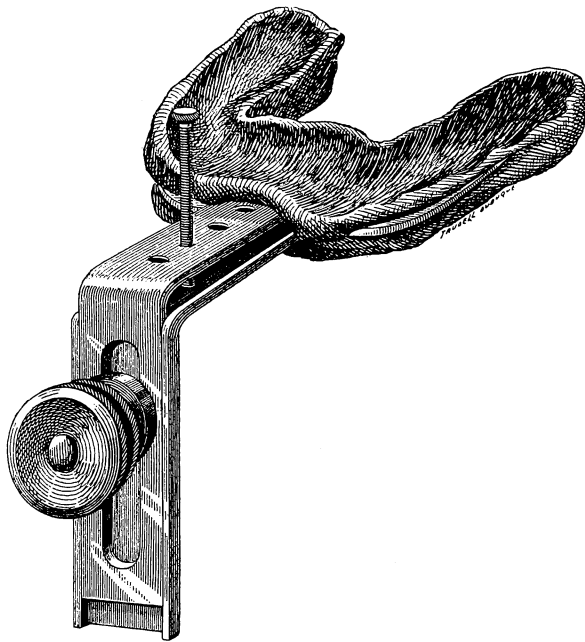


can you judge of the proper restoration of the features, the shape, size, color and appearance of the teeth; the width of the smile has somewhat to do with it also. Again, another objection to the wax plate for taking the bite is that you are never sure that it has not tilted, there being in most cases little or no adhesion to the roof of the mouth; consequently, uneven pressure of the lower teeth will cause it to tilt or fall down upon the side opposite to that upon which the pressure is exerted. When the plate is made you find an imperfect articulation. In case of a full set it requires considerable skill and care to be sure that the plates rest firmly upon the ridges above and below.

When an imprint or impression is made on both sides of a piece of wax at the same time you may be sure that it shows the correct distance between the jaws.

As the result of long experience, I have been led to devise an appliance that for efficiency and simplicity answers every purpose. It is represented in Fig. 1.

To use it, proceed as follows: Adjust it for length of bite with the screw on the top, which opens or closes it. When in the desired position, press down firmly and fasten by the thumb-nut on the back. The circular arms may be bent in or out, up or down, as desired; they are for the purpose of preventing the wax from drawing together when removing



from the mouth. Warm a small roll of wax, press in, around and over arms and end of bars, then place in the mouth.

After head rest has been lowered, throwing up the chin of the patient, direct him to close his teeth and swallow, which makes it almost impossible to protrude the lower jaw beyond the normal. Let him close until the ends of the bars are felt. When removed from the mouth the bite appears as shown in Fig. 2.

It is also reversible. By simply turning up or down, it may be used for any one—under-shot or over-shot; idiot or iron-jawed athlete.

Electric Malleting.

By DR. PERRY R. SKINNER.

Soon after cohesive gold came into use, electricity suggested itself as a means of producing power to condense the gold. For this purpose several instruments have been invented, nearly all of which have failed to give complete satisfaction. The Barnes Skinner mallet has been in actual use for three years, and has proven itself entirely efficient and reliable.

Formerly all electric mallets of sufficient power were designed with two or more magnets, but by using a magnet of special design, one is found to be sufficiently powerful to meet all requirements. Owing to this feature, this mallet is compact, neat, and light in weight. There is absolutely no friction to be overcome, as the armature forming the hammer stands directly over the magnet, guided by the tool-holder through its centre.

The hand piece of this instrument is entirely free from all complicated arrangements for opening and closing the electric circuit, as the contacts on the other extremity are closed by pressure on the plugger point, and opened automatically when the pressure is removed. These contacts can be removed and replaced by any one having but a slight knowledge of electricity, owing to the simplicity of their construction and arrangement. With ordinary care, however, their removal will never be required.

Another important feature is the flexible connection for attaching the battery cord to the mallet. This connection gives a perfectly free motion in all positions.

One of the most appreciable features is the small amount of electricity required, and for this reason, it is practical and economical to run the mallet from a dry battery, although a storage battery may be used by those who desire it. The mallet can also be supplied with a special winding for any street current. Any points can be used, either cone socket or automatic.





The Treatment of Interproximal Spaces.

By RODRIGUES OTTOLENGUI, M.D.S., New York.

Read Before the Second District Society in Brooklyn, February, 1897.

Hundreds, if not thousands of articles, have been written explaining how, when and where to insert fillings in human teeth, but I know of but one paper, dealing exclusively with the filling of teeth with relation to the inter-proximal space. This was an article published in the *Dental Review* (Vol. IV., page 441), by Dr. Black. In that paper the author addressed himself rather to a consideration of the normal condition of the knuckle or contact point, in its relation to the pendant gum tissue between the teeth, and broadly speaking, advocated a restoration of the original lines.

**Restoration
of Original
Contour.**

This also has been the teaching for a greater number of years than can be calculated without too great research. Moreover it is the natural hypothesis of the purely mechanical artisan. He is presented with a structure, a portion of which has been removed or lost, whether by accident or caries, and it becomes a mere matter of training and skill to absolutely restore the original form, by building along the lines which remain. By the curves of the broken lines he calculates to a nicety, what the perfect form was, and it is gratifying to himself to be able to reconstruct what has been lost. This method has had a pseudo-scientific support also, for who has dared to deny that the rule which follows Nature, is a safe guide?

Whilst I am ready to admit the efficacy of the rule for general practice, I wish to call attention to a large and important class of cases, in which it would be, and has been, mischievous practice to follow this dogma, and build on the lines of original contour.

The human jaw is quite differently constructed from that of our common domestic pet the dog, and a few minutes spent in considering the chief point of difference, will be profitable.

There is no special difference, that has any bearing upon the points which I wish to make, in the incisive region, but in the masticating region we find a total dissimilarity. The molars and bicusps of man are cuneiform in shape with the bases of the wedges uppermost, while the similar teeth of the canine are pyramidal, with their apices uppermost. The occlusion of man, is a series of broad surfaces set one against the other, while in the dog the pyramidal teeth occlude, the points of one set fitting nicely between the teeth of the other.

This brings us to a consideration of the gum tissue. As the dog's

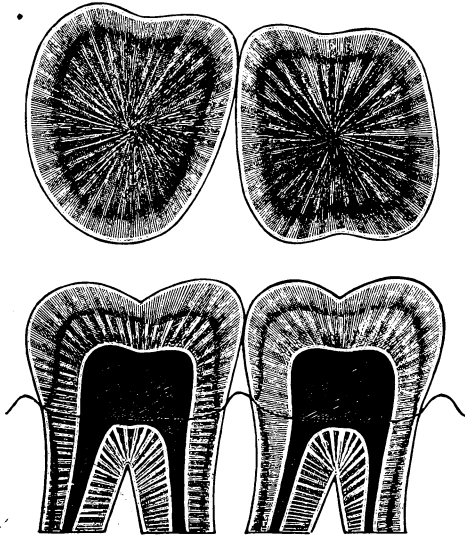


Fig. 1.

pointed tooth presses almost against the gum of the opposite jaw, it is not strange to find the gum hard, thin, and supported by the bony process which it barely covers. In the man's mouth the wedges presenting with these bases uppermost, a V shaped space intervenes, and this is filled with pendant gum tissue, soft and readily injured, were it not for the protection afforded by the contact of the wedges. Were this protection removed, mechanically or by caries, we would find resulting the condition of the dog, the food during mastication being forced up against the gum, between the teeth, but unlike the dog, the arrangement of gum tissue being unintended for such use, and non-resistant to the unusual condition, the pendant soft gum tissue would suffer under the new strain, and inflammatory sequences should be expected, which if unrelieved, would be followed by destructive processes, resulting in a rapid resorption of the gum tissue, or else a pathological increase of the same. In other words we must expect either atrophy, or hypertrophy.

**The Abandonment
of the Arthur
System of Filing.**

It is this fact which caused the abandonment of the Arthur theory of filing spaces between teeth, Dr. Arthur having noted the immunity of the dog from caries, though living in the same environment as man, but having entirely overlooked the structural difference in the jaws of the two animals, which I have here pointed out. The adoption of the Arthur system caused a temporary abandonment of contour methods, but with the recognition of the errors of the Arthur system, the profession have rushed blindly back to contour methods, and as commonly practiced to-day, it may be said that *our toothfillers are at work upon purely mechanical lines*. The average dentist of our time is dealing solely with the tooth, too many being oblivious of the surrounding tissues, and of the relations which exist between the two, and which

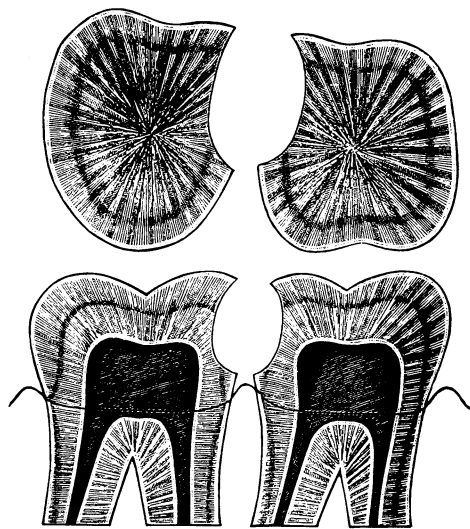


Fig. 2.

must have, or should have, a modifying influence upon our obedience to purely mechanical laws.

The fact that filled teeth sometimes return in a state of disease, was probably the first cause which compelled the dentist to study the body, or at least that part of the body upon which he works. This study has grown, and is growing until the day is not far distant when the dentist will be a mechanic, only in the same sense that the general surgeon is a mechanic.

He will thoroughly understand mechanical principles, and he will have the skill to apply them for the relief of human ailments, but his mechanics will be subservient to his knowledge of physiology. These men

will differentiate between those instances where restoration of original contour is best, and those other cases where such a course is contraindicated, one class of which I will now describe.

In Figure 1, is presented a not infrequent condition in the superior molar region. We have a cross section of a first and second molar, which shows that the two have different shapes; the first molar being somewhat triangular, while the second is more nearly a square. Looking at this figure it is seen that the contact point is towards the buccal side, whilst towards the palate there is a diverging space. A longitudinal section of the same teeth with gum margin indicated by the cross line, shows the contact point near the masticating surface, the cuneiform shape of the teeth producing an increasing divergence towards the roots, resulting in the well-known V shaped interproximal space, practically filled with gum tissue.

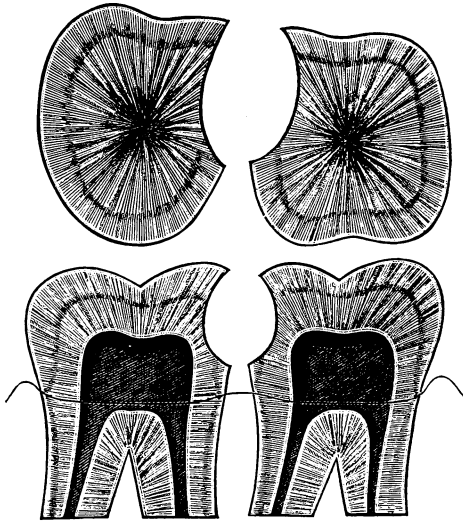


Fig. 3.

Should caries attack the approximal surfaces of these teeth it would be at or near the contact point, and would progress until the enamel of the crown would become so weakened by loss of its support of dentine, that the force of mastication would crush it in, exposing the presence of the cavities. The condition at this juncture is shown in Figure 2, where we view the destruction from two aspects. In the longitudinal section we see that though the pendant gum is still normal in shape, fully occupying the interproximal space, it is now subject to pressure, and other disturbance, resulting from the impacting of food between the teeth, entrance being afforded by the cavities. If these cavities would be filled immediately, the

rule which bids us imitate Nature is the best guide, and such restorations would practically reproduce the condition shown in the first figure, except that the lost tooth bone would be replaced with the filling material.

If, however, after the crushing in of the coronal surface these cavities should be neglected, the constant pressure upon the now exposed gum, with the irritation due to the lodgment and retention of food, would eventually bring the teeth to us in the condition shown in Figure 3. Here we see that the tissues have become atrophied, and there has occurred what we term a recession of the gum. Now we see more clearly than before the divergence of the sides of the teeth, the dangerous interproximal space becoming a factor of prime importance in deciding how best to fill the teeth.

Let us suppose that, being purely mechanical, we follow the well known rule, and restore original contour. The result is shown in Figure 4.

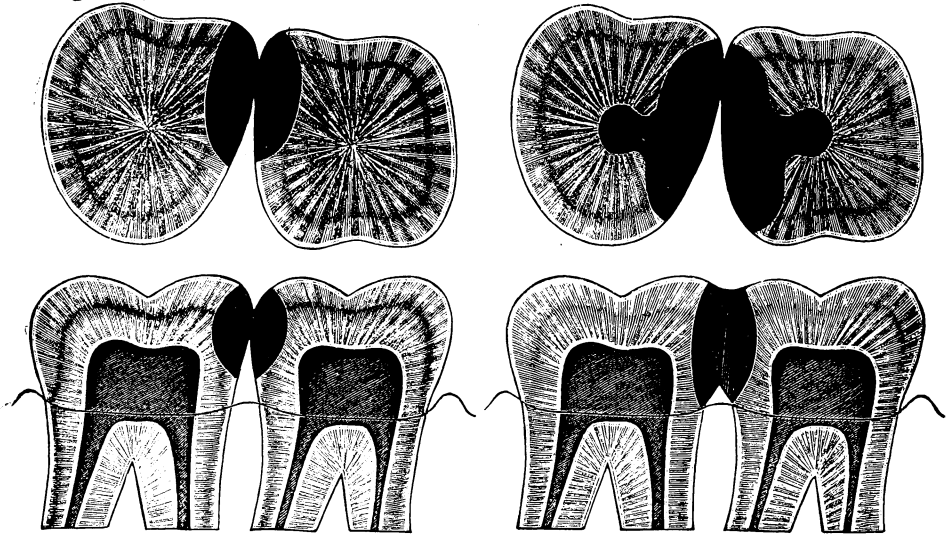


Fig. 4.

Fig. 5.

The fillings shown here accurately restore the original form of the teeth, as we saw them in the first figure, and such restoration would have been exactly proper with the gum intact, as it was in the second figure. But with the gum receded as it is, such fillings would in ninety per cent. of cases, fail at the cervical border. This failure at the cervical border, occurring as it does in the practice of men who admit themselves to be skillful, is one of the bug-a-boos of the profession; and like all bug-a-boos it is a myth. It is not the perfect filling which fails; neither is it the imperfect tooth which is to be blamed for this recurrence of decay. The truth is that the true cause of recurrence of decay, is that the method of

the operator was inadequate to the problem presented. He may have inserted a *mechanically* perfect filling, but *scientifically* considered it was imperfect. He may have absolutely restored original contour, but original contour may not have been the shape best adapted to the preservation of the teeth.

In the light which Williams's researches have shed upon the cause of caries, the practitioner of the future must build against bacteria, which means that he must so fashion his fillings, that no lodgment shall be afforded for the pabulum of micro-organisms. Glance for a moment at these teeth in Figure 4 and note that absolute restoration of form as seen in Figure 1 has been effected; note that because of the atrophied condition of the gum, the interproximal space invites the lodgment of the debris of the mouth. How shall it enter, if the knuckle is perfect, may be asked. A study of the longitudinal section finds no reply. Apparently no food should pass the barrier of perfect contact. But the cross section reveals the entranceway. The contact is seen to be only along a narrow strip towards the buccal side. The diverging surface of the first molar offers a broad passageway for food, which the normal gum formerly forced into the mouth, but which now is crowded into the interproximal space.

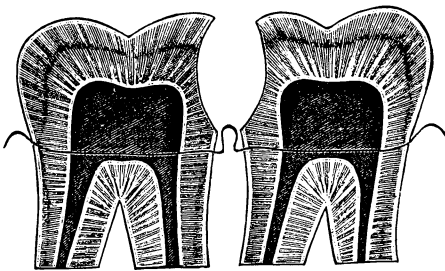


Fig. 6.

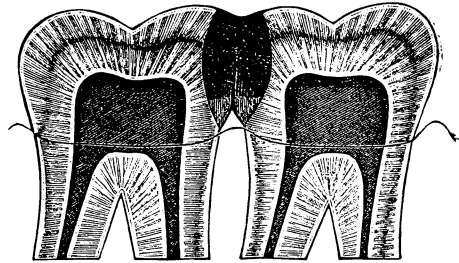


Fig. 7.

Patients endowed with super sensitive nervous systems will return, complaining of this retention of food, and the pain caused thereby, and I know by personal experience that the pain thus occasioned may be infinitely greater than that of ordinary pulpitis. I know from similar experience that such fillings are worse than useless; they are a menace. The patient believes that his teeth are well filled. His dentist assures him of this fact, and he has faith in his dentist. But in one day, or more often in one night, will come a moment of pain more excruciating than usual, and a hasty early morning call at the office of the dentist leads to the discovery that — what? *The pulp is exposed.* "How? Why? Was not my tooth filled all right?" "Certainly," is the reply, "but another cavity has come. My filling is all right. See. I'll show it to you."

And with mouth mirror and hand-glass the dentist does so. But was the tooth properly filled? I think not. In my opinion, in these cases of recession, a departure from original contour is demanded, and such a method is shown in Figure 5. Here it is seen, by observing the longitudinal section, that the cavities in both teeth, but especially in the first molar, have been cut away along the cervical border, until they are near the gum, in its receded position. The fillings have then been made so as to have contact almost throughout. At the cervical portion we find no more space now, than when the teeth were perfect, as in the first figure.

I would call especial attention to the form at the coronal aspect. Normally there is a curve to this edge of the tooth, as seen in Figure 1, and again in the teeth filled to follow contour in Figure 4. It has been my practice for years, in adjacent fillings of this character to make no bevel here, but to have square edges to both fillings, thus offering a practically continuous surface to the opposing teeth. The contact point thus begins at the extreme coronal edge of the filling, and extends as near to the gum as possible. An examination of the cross section, will show the method of contour from that aspect. Here again is seen a great extent of contact. The palatal walls have been trimmed away freely, so that an entirely new form may be given thus obliterating the space between the teeth, which was unavoidable with the cavities as they originally presented. This extension of the cavity, necessitates an entrance into the sulci for proper retention, and the method of anchorage is adequately shown in the figure.

The extreme result of neglect of adjacent approximal cavities is next shown in Figure 6, where it is seen that the cavities have now extended far below the original gum line, and we have hypertrophied tissue between. This when removed, still leaves cavities which are difficult, because of the impossibility of using the rubber dam. The gum being in its original position elsewhere about the teeth, prevents the dam from passing high enough between the teeth, so as to expose the cervical borders of the cavities. Many devices have been resorted to for meeting this difficulty, one of which is worthy of mention, as being adequate in cases which are not too difficult, but which nevertheless resist other efforts. This is to use fine copper wire instead of silk, for a ligature. This wire is twisted tight around the neck of the tooth, and then may be pressed up between the teeth, beyond the cavity border carrying the dam with it, and holding it.

My preference, however, is to use a hand matrix and fill the cervical portion of the cavity with amalgam as indicated in Figure 7, covering with temporary stopping, and completing with gold at a subsequent setting.

Excision of the Inferior Dental Nerve.

By J. A. BLACK, M.D., San Francisco, Cal.

Read before the San Francisco Dental Association, March, 1897.

Reported by CLYDE S. PAYNE, D.D.S.

Special neuralgias, those involving the fifth pair, particularly, are of extreme importance to the dentist. Of this pair the inferior dental branch is the one to which our attention is most often called, because of the long, bony canal through which the nerve takes its course, and because of the peculiar reflex pains which it produces.

Many an inferior maxilla has lost its adornment in the way of teeth because of supposed pulp nodules or hypercementosis of the root, when the trouble lay in the nerve beneath—in the inferior dental canal. Dentists often hesitate to operate, or recommend operation in these cases, because of the amount of tissue involved, the scar left by most operations, and the uncertainty as to whether the case of neuralgia is peripheral or central.

It has been the effort of surgeons, both oral and general, to simplify the operation of the removal of the inferior dental nerve; among the most prominent of these are Garretson, Agnew, Pancoast, and later, Cryer. All the methods devised by these men involve considerable tissue, and all leave external scars of greater or lesser magnitude. It devolved upon Trueman W. Brophy, of Chicago, to devise the method reported by him at the Dental Congress, World's Fair, '93, by which the same work can be done in a more thorough manner with no external scar and the involvement of but small amount of tissue other than that directly connected with the nerve itself.

I recently had occasion to remove an inferior dental nerve after the manner devised by Dr. Brophy, and a brief report of the case may be of interest.

The patient, a Mr. H., aet. 61, came under my care over four months ago, suffering from neuralgia of some six years' standing. The pain involved on all occasions the inferior dental region, and severe spasms extended to the infra and supra orbital.

Mr. H. had lost all the teeth on the left side below, and the inferior nerve had been cut at its entrance at the inferior dental foramen. He had gone through the full list of so-called neuralgia specifics with no relief, so

that he was in proper spirit for anything radical that promised relief and would not leave him marked for life.

**Method of
Excision of the
Inferior Nerve.**

On November 12th, 1896, with the aid of the family dentist, Dr. Boxtton, the patient was anaesthetized and a longitudinal incision made over the dental foramen, about half way between the borders of the bone and corresponding with the root of the second bicuspid. On reaching the bone I found the dental foramen completely ossified, but a slight difference in color marked its location. A rapid cutting bur, attached to a dento-surgical engine, soon made an opening in line with the inferior dental canal, and a long flexible hand drill was introduced into the opening. By a gentle twisting motion this was carried backward past the turn one-half inch posterior to the middle foramen, and then upward and backward until it could be felt under the membranes in the mouth at the inferior foramen. As the instrument was withdrawn nerve tissue and other contents of the canal came with it. A larger hand drill was then introduced and carried through the canal in the same manner, in order to most thoroughly remove the lining of the canal. The hemorrhage was comparatively slight and of but little importance. The wound in the mouth was then cleansed and packed with gauze.

Dr. Brophy claims, and it seems true in this case, that the canal becomes filled with plastic material which in time furnishes bone tissue, and the canal is thus obliterated.

Four months have now elapsed since the operation without any recurrence of pain. After noting the speed with which one can operate in this manner, and the small amount of tissue involved, the thoroughness with which the work can be done, and the absence of any external scar, one would deem that Dr. Brophy's operation accomplishes all that he claims for it.

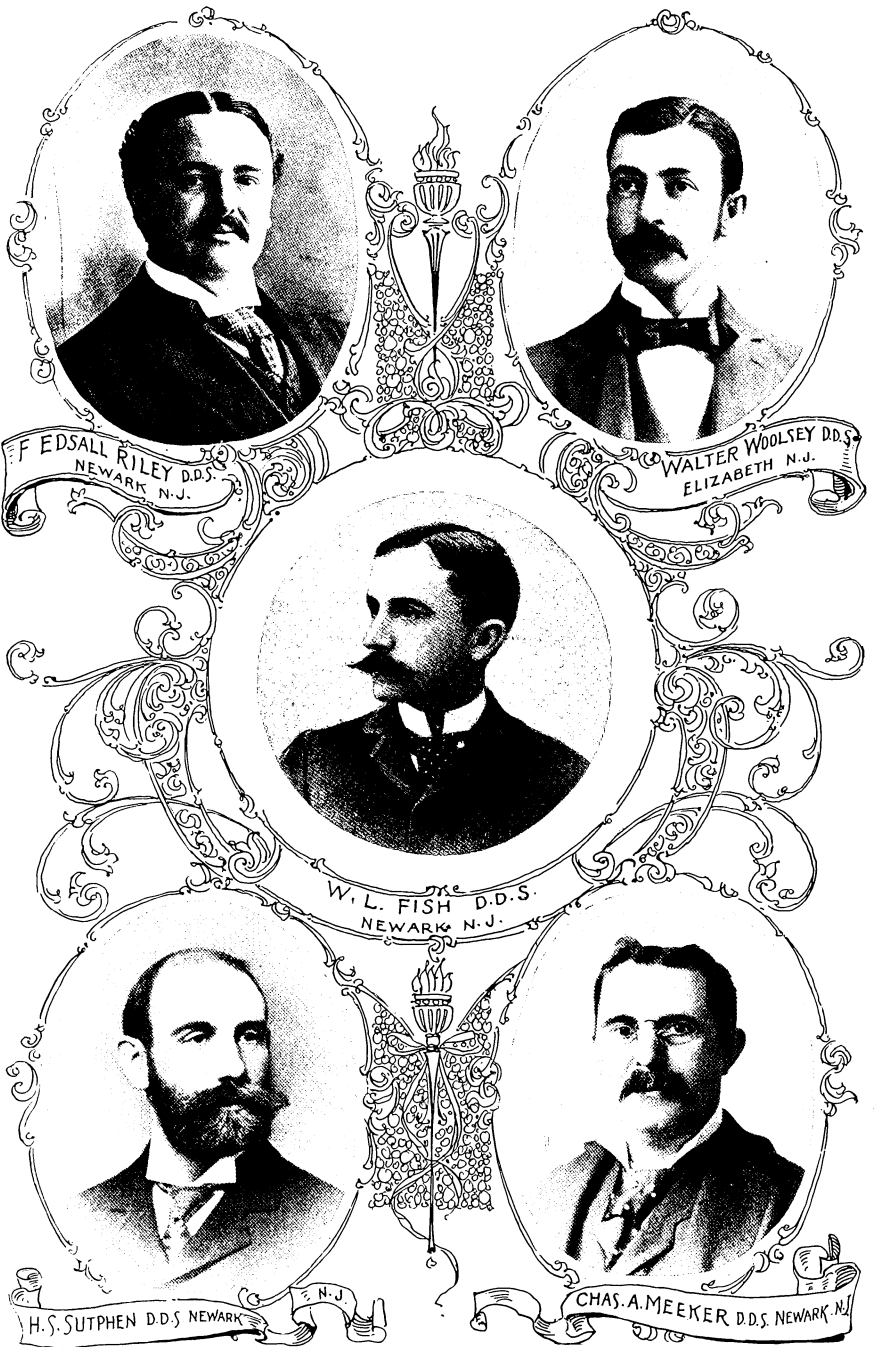


Central Dental Association of Northern New Jersey—Seventeenth Annual Banquet.

The anniversary meeting and banquet of the Central Dental Association of Northern New Jersey is an event always pleasurably anticipated by dentists within fifty miles of Newark, and attended by all who can possibly make it convenient to be present. Guests who are invited one year invariably register a hope that they may not be forgotten in the future. This year's meeting was no exception to the general rule. Over a hundred dentists sat at table and enjoyed that convivial interchange of thought, both dental and incidental, which makes acquaintances of strangers and brethren out of mere acquaintances. By these means are men imbued with true ideas of confraternity; in this manner is the dental world knit into a brotherhood which recognizes a community of interests; through such assemblages have the secret methods of the ancient practitioners been superseded by the free exchange of modes of practice, which have elevated dentistry from a classification among the trades to an exalted position among the liberal learned professions.

While these men were dining a camera fiend succeeded in obtaining snap shots of all who were not too modest to place their faces on record, so that about half of those assembled are depicted in the illustrations. In the first group we find the officers of the society for last year together with the only addition to the list of officers resulting from the election of this year. It is worthy of note that the election of officers in this society never occupies more than half a minute. They are nominated in one batch, seconded as one lot, and elected in one breath. Other societies desirous of knowing the secret which avoids tiresome ballots are referred to the dictionary definition of "harmony."

In the second group are found the members of the Executive Committee, together with the portrait of Dr. Iredell, the President of the State Society. In the third are a few of the guests, while the fourth and fifth introduce the plain members, all of whom, however, are handsome. There names are as follows: (1) Dr. C. W. F. Holbrook, Newark. (2) Dr. Wm. H. Pruden, Paterson. (3) Dr. J. Allen Osmun, Newark. (4) Dr. Wm. Rosenthal, Elizabeth. (5) Dr. Wm. E. Linstedt, New Brunswick. (6)



F. EDSALL RILEY D.D.S.
NEWARK N.J.



WALTER WOOLSEY D.D.S.
ELIZABETH N.J.



W. L. FISH D.D.S.
NEWARK N.J.



H. S. SUTPHEN D.D.S. N.J.
NEWARK



CHAS. A. MEEKER D.D.S. NEWARK N.J.



OSCAR ADELBERG D.D.S.
ELIZABETH N.J.

C. S. HARDY D.D.S.
SUMMIT N.J.

F. G. GREGORY D.D.S.
NEWARK N.J.

F. C. BARLOW D.D.S.
JERSEY CITY N.J.

W. E. TRUAX D.D.S.
FREEHOLD N.J.

GEO. E. ADAMS

DR. J. L. CRATER
ORANGE N.J.

HARVEY IREDELL D.D.S.
NEW BRUNSWICK N.J.

Dr. J. S. Vinson, Newark. (7) Dr. K. B. Osmun, Summit. (8) Dr. John B. Fisher, South Orange. (9) Dr. Nelson M. Chitterling, Bloomfield. (10) Dr. Clark A. Heydon, Hackensack. (11) Dr. E. Sigler, Newark. (12) Dr. John S. Voegtlen, Newark. (13) Dr. F. W. Stevens, Newark. (14) Dr. P. A. McLean, Caldwell. (15) Dr. Thos. Moore, Paterson. (16) Dr. G. Carleton Brown, Elizabeth. (17) Dr. S. S. Hawley, Newark. (18) Dr. C. W. Hoblitzell, Jersey City. (19) Dr. J. N. Harris, New Brunswick. (20) Dr. P. J. Wilson, Trenton. (21) Dr. Wm. P. Richards, Orange. (22) Dr. J. N. Van De Water, Madison. (23) Dr. Henry A. Hull, New Brunswick. (24) Dr. C. S. Stockton, Newark. (25) Dr. J. C. Graft, Newark. (26) Dr. S. C. G. Watkins, Montclair. (27) Dr. Joseph W. Curtis, Hackettstown. (28) Dr. W. G. Chase, Princeton. (29) Dr. A. B. Luckey, Paterson. (30) Dr. C. A. Coppinger, Jersey City. (31) Dr. A. R. Eaton, Elizabeth. (32) Dr. Geo. M. Holden, Hackettstown. (33) Dr. T. W. Purci, Elizabeth. (34) Dr. Frank L. Hindle, New Brunswick.

The dinner itself was most appetizing, the courses being well selected, well cooked and well served, and withal, not too dry. The more sensuous longings having been satisfied the minds of all were attuned to appreciate the mental pabulum set forth in tasteful style and fitting epigram upon the programme, which was then introduced by the president.

Gentlemen, it is my duty and pleasure, on behalf of this association, to welcome our friends and guests who have come from other cities, and other States, to meet with us this evening. We are very glad to have you here at this, our seventeenth annual banquet, and we give you a most hearty welcome. Gentlemen, we are styled the New Jersey Hornets, but I am sure you are not afraid of being stung. You are acquainted with the family of hornets, and you know that they usually live through one season and die in the fall. But we live throughout each year, for many years, thus proving that we are a long-lived family.

I will now introduce to you the toast-master of the evening, Dr. Meeker.

The Toast Master,
Dr. Chas. H. Meeker.

Our first regular toast is, The American Dental Association. It was to have been responded to by the President of that association, Dr. James Truman, of Philadelphia. I am very sorry to say that Dr. Truman is at this moment ill with the gripe; but he has sent a paper, and the secretary will read it. Dr. Truman is the representative of the highest association of dentists in this country. The American Dental Association.

The American Dental Association.

Dr. James Cruman. The importance of organized effort is so apparent that, I presume, I may be spared the attempt to prove this by any argument of mine. All of Nature's processes from the molecule to a highly organized human being, demonstrate that it is only by a concentration of effort that Nature works to the completion of her greatest results, and that which is capable of demonstration in the physical is equally to be shown in the mental. From the earliest manifestation, which men call instinct, to the loftiest intellects of the present and past ages, all speak, in no uncertain tones, of the combination of molecular forces to one common end—organization.

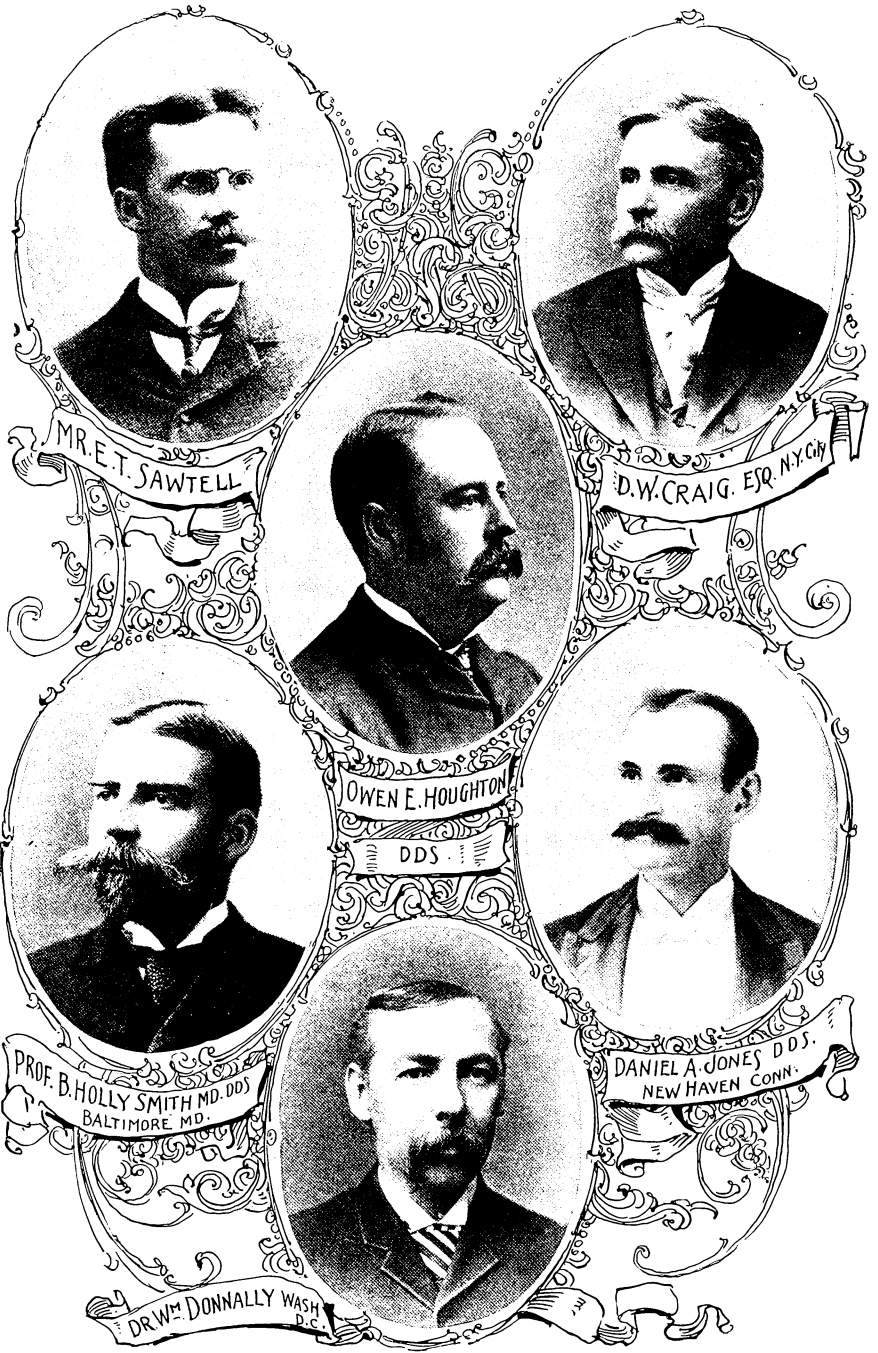
The profession, therefore, that attempts to discard this universal and ever active law, is contending against the impossible, and in the end professional death follows. That which is true of dentistry as a whole, is equally true of its individual parts. The isolated wrecks along the shores of professional waters, are seen and recognized by all.

There is a feeling extant, whether justified or not time will determine, that the dental profession in this country has outlived the present methods of organization; in other words, that the time has arrived when a different form of association must be tried for the benefit of all sections, North, South, East and West. This is not the place nor time to argue this question, but it seems to me that the thoughtful dentist should give the subject thorough study, that when called upon to act, he may be prepared to cast all the light possible upon the matter.

**Origin of the
American Association.**

The American Dental Association was organized in 1859, and had its origin in a quite general dissatisfaction with methods of organization previously in force, notably, those of the American Dental Convention. It has had a life of nearly forty years, and very few who are cognizant of its work, during that period, will contradict the statement, that this work has been directed to the advancement of the dental profession in the United States. That more might have been accomplished is possible, but with the necessity of continually dealing with incongruous elements, such a national organization, no matter what its form, must be more of the character of a legislative body than a scientific, hence criticism is, in this direction, out of place. The improvement, in my judgment, can only come through a gradual modification of the organization, and especially by that higher growth toward a more perfect standard of professional excellence.

I have been led to these remarks by the idea which it is feared, is



MR. E. T. SAWTELL

D. W. CRAIG, ESQ. N.Y. CITY

OWEN E. HOUGHTON

DDS.

PROF. B. HOLLY SMITH MD. DDS.
BALTIMORE MD.

DANIEL A. JONES DDS.
NEW HAVEN CONN.

DR. W. M. DONNALLY WASH.
D.C.



quite prevalent, that this American Dental Association has become a useless burden to the dental profession. This idea, if it exists, should be repudiated, for it has no foundation in fact. This association is more alive, more active for good to-day, than it was thirty-eight years ago. It is true, many have become disheartened, and we hear everywhere the old cry, "I get nothing by attending these meetings, and what avail is it that I make sacrifices of money and time to be present?" It is the old barren excuse for duty neglected, which ceased to be a novelty many thousands of years ago in the past history of the world.

**American Should
Not Be
Abandoned.**

I presume no one will deny that a national organization is imperative. This being granted, why attempt to re-organize another and relegate the American to a subordinate position, or kill it altogether, as is advocated in some quarters? The history of every organization has been the same; first, a period of enthusiasm, then disaffection and finally weakness, if not disorganization. The present national body has maintained, uninterruptedly, for the long period of its existence, the enthusiastic devotion of those intimately connected with its management. It has not reached the period of disaffection, although there are signs that some outside of the fold, would foster such feelings.

It is very true that the American Dental Association is not supported as it should be. It is not to be expected that a very large percentage of the dental profession of the United States will take an active interest in its work, but this should be greater than it is, and it becomes the duty of every member to discover the reason for this outside indifference.

I, for one, have felt, for many years, that the plan of organization followed in our State and National societies in dentistry and medicine, is defective, and has in it an element detrimental to the best interests of these representative bodies. I allude to the separation of members into two classes, permanent members and delegates. This question cannot be debated here, but its effect, I am confident, has been to estrange a large body of well-meaning professional workers from these associations. This subject was before the Committee on Constitution, but the time, I fear, has not yet arrived for a change in this direction. The idea is not to make these bodies mere conventions, but while enforcing scientific rules to give them more elasticity and a more representative character. We want to come nearer the heart of the profession as well as its intellect, and it is just here, I fear, much of the failure in organization has its origin.

**Union With
Southern
Seems Improbable.**

The meeting at Old Point Comfort, in August next, will, I believe, be a memorable one. I am not feeling over enthusiastic as to the success of the effort of the American for union with the Southern, for there has developed, in both sections, a decided opposition to sinking one into the other. Whether the matter will end in things remaining as they are, or in the organization of a new body upon the ruins of the old, time alone can demonstrate. Whatever is to be the outcome we should all be there, prepared to remain until this question of organization has been placed clearly before the profession, as no doubt it will be by some of the ablest thinkers in dentistry. Whether this work be accomplished at this meeting or not, it must still remain an epoch-making period, and I feel sure it will be harmonious in spite of many conflicting views.

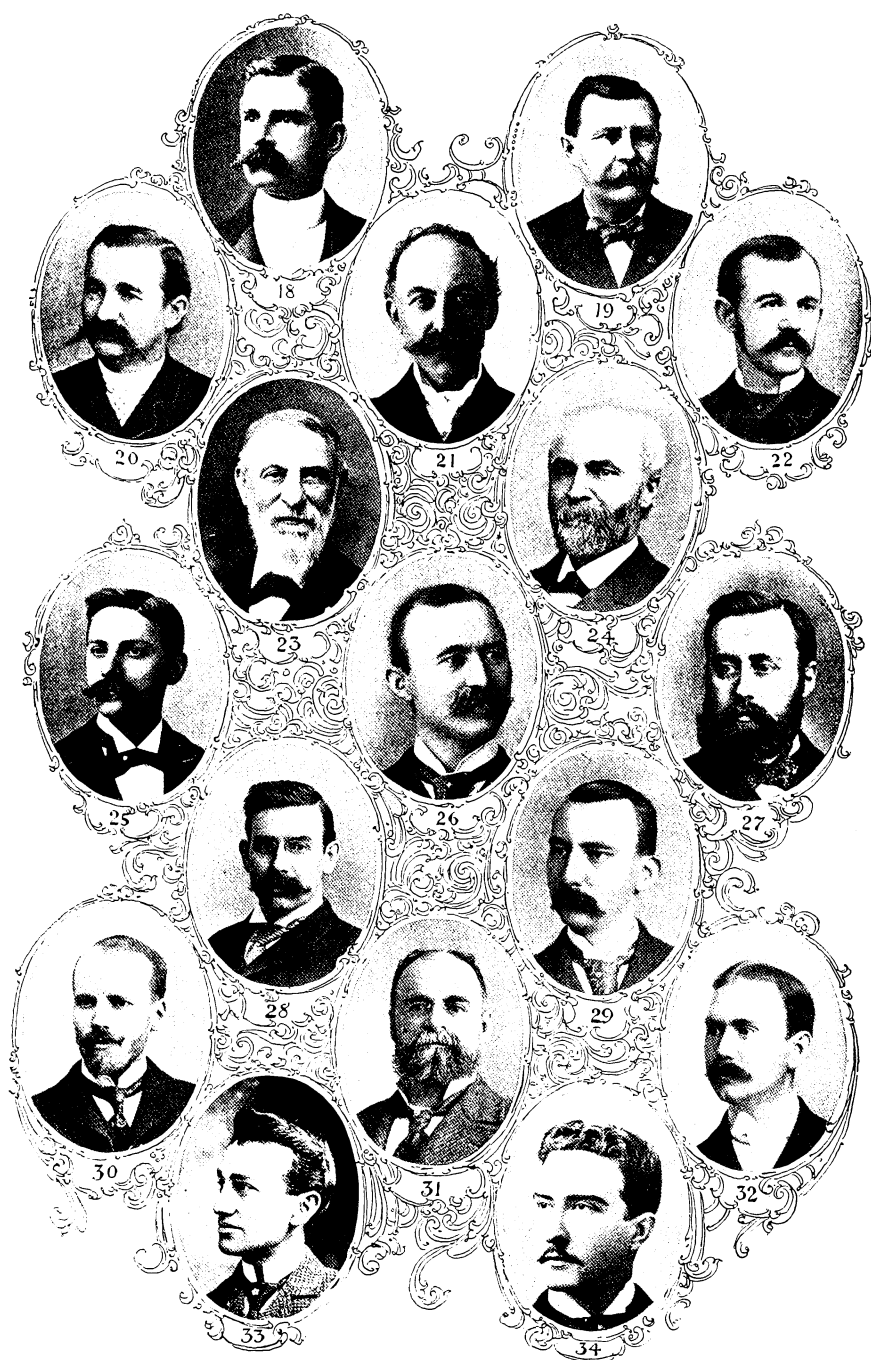
Some five months yet remain before we will be called together at Old Point Comfort. All the Eastern States should be fully represented, and it is hoped that large delegations from the West and South will be there. Every effort is being made, and will continue to be made, to effect this, for it is essential that if any change in plans of organizations is decided upon, it should be accomplished through the combined wisdom of the many, rather than through the prejudicial preferences of the few.

It is hardly necessary, in conclusion, to express the hope that New Jersey will lead the membership column of the American Dental Association for 1897. This State has never been inactive in organized effort, and I am sure will continue to make herself felt in the good work. We ought not, however, to recognize State lines in dentistry, neither should we know North, South, East or West, but gathering with one impulse in one place, we should "lay our gifts upon the altar" dedicated to an unselfish devotion to the profession of our choice.

With this hope I close, trusting to meet one and all upon the soil of old Virginia and by Chesapeake's waters, figuratively, smoke the "pipe of peace" and lay there the foundation of a national organization without sectional interests, and broad enough to meet the needs of the dentists of the new century yet before us.

The Toast Master. I will call upon the secretary to read some letters and telegrams that have been received from prominent gentlemen who cannot be here to-night.

Letters and telegrams were read by the secretary from the following gentlemen: Dr. J. N. Crouse, Chicago; Dr. Alexander C. McCurdy, Baltimore; Dr. Wendell C. Phillips, New York; Dr. James F. Griffith, Salisbury, North Carolina; Dr. C. V. Vignes, New Orleans; Dr. F. A. Shotwell, Rogersville, Tennessee; Dr. H. J. Burkhart, Batavia, New York;



Dr. D. W. Fellows, Portland, Maine; Dr. Charles A. Brackett, Newport, R. I.; Dr. W. Harvey Root, Germantown, Pa.; Dr. Charles E. Chittenden, Madison, Wisconsin; Dr. A. G. Friedrichs, New Orleans, La.

In the absence of Dr. Crouse, I feel that I can
The Coast Master. call upon one gentleman who is present to fill his place; and I will change the toast a little and call upon Dr. Hubbard, the Dean of the New York Dental School, to speak upon dental education.

Dental Education.

Dentistry in the past has done a great deal for humanity. I entered the practice of medicine because it seemed to be a field in which we could do the greatest good to the greatest number, but I have devoted myself to a specialty of medicine because I found that by being more scientific and broader in one field I could do a greater good to a greater number. And I believe that you, gentlemen, represent a specialty than which there is no better field for doing good, none which comes into closer contact with the community.

There are some objections, to my mind, to the innovation of calling dentistry stomatology. It is true that this field is growing out of the mere domain of mechanics, or of mechanics and art, and going into the broader field of scientific knowledge, yet at the same time it is well for you, as I believe, not to forget the cunning of the hand which has been the greatest force in the development of that art.

Requirements in New York.

In speaking of education, it behooves me to touch somewhat upon the status of dental education in New York. The preliminary requirements to the study of dentistry have been broadened a great deal during the last two or three years, and it is claimed by many that these requirements are rather too onerous. But, gentlemen, as time goes on, as the dental profession broadens its domains, covering a field which is really surgical in its aspect, you will find that the preliminary requirements as now instituted in all the colleges, are not too great. The study now requires an education which leads a man to think scientifically. The first thing that the student ought to learn is to learn to think. The study of the dead languages in our schools of letters heretofore has been for the sole purpose of teaching a man to think. The study of the higher mathematics trains a man to think, there being little expectation that he will utilize the knowledge practically. The man who is most broadly educated is the man who thinks intensely, who brings to

bear upon the subject immediately before him a fund of previously acquired information; and so the preliminary requirements for a dental education by no means represent wasted time. It is time well spent—time the results of which will redound to the honor and the glory of the dental profession in years to come.

**What is Taught
in the
Colleges.**

A word as to the studies taught in the dental colleges of to-day. It is said that we cover a great deal more ground than is absolutely necessary in order to practice. That is true. We cover more ground than seems absolutely necessary for the work of mechanical dentistry or of operative dentistry at the chair, but do we cover more ground than is necessary to broaden a man and make him capable of knowing his patients thoroughly, and of coming into contact with them and with the world on equal terms and with credit to himself and to his profession? I claim that a professional man may greatly influence his patients by an intuitive knowledge of all phases of the art and profession which he practices.

Permit me to express the hope that this Association will go forward; that you will find greater necessity for advancing the lines of broad dental education as specialists of the great science and art which we medical men practice, so that we may find that you are our brothers in truth and in deed. I am glad to see so many here to-night, and so many representative men of your profession—men who I am sure are in hearty sympathy with all the advancement that can be gained in this branch of medicine. I am glad to meet you, I am glad to become acquainted with you, and if I can do something for the advancement of your noble profession I shall be well repaid.

The Toast Master.

This has been Dr. Hubbard's first experience with the Central Dental Association of Northern New Jersey. I hope it will not be his last. The gentleman whom I will now call upon I do not suppose will confine himself to the subject of the toast, Art in Dentistry and Art in the Newspaper, and I shall not ask him to. Everyone who reads the New York World knows Walter McDougall, to whom I have now the pleasure of introducing you.

Art in Dentistry and Art in the Newspaper.

The subject of the toast, although Dr. Meeker has intimated that I need not pay any attention to it, **Mr. Walter McDougall.** seems to be the relation between art in dentistry and art in the newspaper. I suppose he thought they were related because one deals with drawing teeth and the other with drawing pictures, both of which are generally bad when they are drawn. The resemblance between the two arts may be found in the fact that both the artist and the dentist, when he has a job, generally sits down and makes out the bill first. Another way wherein the artist's profession and the dental profession resemble one another is that while medical mistakes are buried six feet underground, and your lawyers' mistakes are sent to State Prison, the errors of dentists and artists are paraded in broad daylight, and even children can tell you whether the work is correct or not. Another connection is found in the fact that the very oldest sample of drawing in all the world is a very masterly piece of drawing on a mammoth's tooth found in a cave in France, a drawing made long before our age. Another very ancient sample of man's workmanship is one of the oldest writings extant, hieroglyphic writings which, in the most minute terms, in the old hieroglyphics, the most ancient form of writing, describes a method of drawing teeth. Now these facts, well authenticated, are not only notable facts of history, placing the two professions in the very foremost rank of human endeavor, but they answer at once the carping criticisms and queries as to why artists and dentists roll in luxury while other men work for a living. In the line of honorable toil nothing is more ancient than the profession of dentistry or than the profession of the artist, and that is why the dentists live on the fat of the land, roll in luxury, and smoke dollar cigars. But the artist has the advantage of the dentist in one respect. All the artist needs is a sheet of paper, a pencil, some ink and a little quiet, and he can sit down and become wealthy and famous, but the dentist must have capital. He has to buy gold, or what he sells for gold, and a lot of other expensive things, before he can do anything, or anybody. He must have brains, of course, but if he can't advertise they are of no use to him. Gentlemen, I can address you only with the greatest feeling. I have owed Dr. Meeker five dollars for the last two years, and I cannot speak before so many dentists without a great deal of emotion. Therefore I must close, thanking you for your very good dinner, which is an epoch in the life of an artist.

The Toast Master.

With considerable modesty, in view of New Jersey's connection with the Association of Dental Examiners, I went to Washington and asked a gentleman who visited us at Asbury Park if he would come here and say something about the National Association of Dental Examiners. I expected he would be here, but this evening I received a telegram from him, also a letter, saying that he could not possibly be present, so I will ask the Secretary to read what he has written, in response to the toast, The National Association of Dental Examiners.

The National Association of Dental Examiners.**Dr. Wm. Donnally.**

The work of the National Association of Dental Examiners has been limited by its nature to lines apparently separate from those followed by any other organization, but that this is only apparent a clear observation of the general history of the organizations within the profession will fully disclose. The spirit which has given an impetus to professional advancement will be found to have actuated its members, and overtures for co-operation in strengthening moral agencies, with tenders of its resources to supplement that of others, to have been features of its effort.

It is the first organization ever formed for the avowed purpose of bringing about high and uniform standards of qualification and from the beginning, in 1862, its effort has been to broaden and give tangible form and legal effect to the foundations underlying the profession's development, which were then altogether insufficient for the enlargement since attained.

Legislation affecting our profession should not be allowed to assume, in any of its essential features, the aspect of a local affair, and the influence of the whole profession should be brought to bear through the efforts of authorized representatives of our National organizations, on the State Societies and on the legislatures. Concerted effort, possible of attainment within a year or two, would make such a plan practicable, and uniformity thenceforward feasible. This is a work in which the National Association of Dental Examiners should take the initiative.

**Future of
the Association.**

To begin with, it would strengthen its own power by making its organization more compact; by providing for either permanency or longer duration of membership; by publishing more extensively measures proposed for accomplishing its objects; by more deliberation in its proceedings; by moving consistently and unflinchingly along definite lines; by acting, as far as possible, in concert with

leaders familiar with the needs and possibilities of the profession; by a consistent course respecting every interest and element affected by its action, and by making only such regulations as will certainly be supported by the profession and respected by the majority of those to whom they apply. By such moderate and conservative means its power for good will steadily increase and its noble purposes be consummated; otherwise, a crisis may soon be reached, jeopardizing its very existence, while some of those who are now under wholesome restraint will exult that its power is being undermined. I do not prophesy disaster, but I sincerely believe that the time has come for more prudent forethought; more conservatism, more careful balancing of the equities, and for more consideration for the limitation of moral restraints than has been exercised or required in years past. That it is quite possible that this Association may meet the demands of changed and changing conditions, its history affords gratifying assurance.

I am an optimist with regard to the future of dentistry. How could it be otherwise with one who has kept in sympathetic touch with our National organizations, and familiar with the issues involved in the reforms and progressive movements of the last fifteen years? Who has been impressed with the fact that during this short period some of the most vital important problems which could affect a profession's development have been taken up and solved, and who to-day sees, as a result, many specific measures and definite agencies operating with visible and unequalled potency as motive forces in uplifting the standards of dentistry and improving the quality of the accessions to its field?

There is one gentleman who has always been a
The Toast Master. friend of the Central Dental Association of New Jersey, and it gives me great pleasure to call upon Dr. W. W. Walker, of New York. I will ask him to respond to the toast, Progressive Dental Societies, but he may say what he chooses.

Progressive Dental Societies.

A progressive dental society does not depend
Dr. W. W. Walker. upon large numbers; it relies upon members of the profession who can work in harmony, who are willing to devote a certain amount of their time, and to spend their money, for the benefit and advancement of their chosen profession, so that the world at large and the members of other professions may see that there

is something in dentistry. The first thing needed in the organization of a dental society, is to get rid of the driftwood and barnacles of personal jealousy. One of the greatest factors in disturbing and defeating the object of dental societies, is that element which must rule or ruin. The absence of that disturbing element is what makes the mid-winter meetings of this Central Dental Society, as well as its summer meetings, so well attended and so thoroughly pleasant to everybody concerned, and which makes this society one of the most progressive and influential in the world. There is not another dental organization in the country that can in the midst of winter gather together the number of good people. A progressive dental society must, in the first place, elect a president whom they can admire and respect; then they must elect an executive committee, composed of men who are not afraid to work for the benefit of their chosen profession; a secretary who will do his work well, and a treasurer who will hold on to the money, if there is any to hold on to. By your works shall you be known; and that is why this dental society is known all over the world. You have an executive committee who are untiring in their work for your benefit, and the same can be said of your secretary and treasurer. First and foremost you have a Meeker. Where can you find his equal? He is the most zealous, untiring and unselfish worker for the interests of the dental profession that I have ever met. There are others who have worked very conspicuously, and among them I may mention Dr. Crouse, of Chicago. Only two weeks ago, in this same hall, Dr. Meeker said, that he had spent 25 years of his life in society work; a quarter of a century. Think of it. There are very few men here who could say that. Now, suppose that he had spent that many years in some scientific branch of the dental profession, what might he not have accomplished? But he has done most useful and valuable work for the profession, and we ought to be proud that we have a man like that.

Now, Mr. President, I will only add that as this Central Dental Society has been in the past the most progressive, successful and harmonious organization to be found in our profession, so may it be in the future, loyal to its members, honored by the dental profession at large, and when the time shall arrive when all the dental societies throughout the country shall be enrolled in the order of the work that they have done in elevating their profession, you will find the name of the Central Dental Society of New Jersey on the crest of the highest wave that rolls, and you will still see emblazoned on their escutcheon, with their emblem, the mystic words which we all know how to appreciate; "Progress, Prosperity and Fraternity."

After the complimentary way in which Dr. Walker has referred to myself, I want to say, in justice to the other members, that they have done more toward the advancement of the society than I myself have done, and they must have the credit. For a number of years past, at the annual meetings of our State Society there has been one gentleman who has always come to fraternize with us; it gives me great pleasure at this time to call upon Dr. Daniel A. Jones, of New Haven, to speak to us of Something Besides Dentistry.

Dr. D. H. Jones. I may say that I am quite alive to the social element in the profession, which is so well exhibited here. I believe in it most thoroughly. I believe that the social part will give us more than the papers and discussions. I don't mean more in the sense that they will take the place of papers and discussions; but, having listened to papers and having, perhaps, taken part in their discussion, we can sit down at the social board together and talk them over, and having been stimulated by the formal papers and the discussions, and perhaps by the repast, we get in this informal talk things that we can carry with us, things that have more beefsteak in them and less soup, more truth and less exaggeration. At a dinner table men tell us of their failures as well as their successes; we get to know one another better; we escape a little from that charlatanism which is the most insidious evil and the hardest to overcome, which is exhibited in quiet suggestion or in silence, allowing the patient to find fault with some other practitioner, and things of that sort. So I say it does us good to get together once in a while, on an occasion like this, where everything dental, is incidental, a place where it becomes necessary for a man to understand the bow that bends—not the bow that bends to shoot the slings and arrows of outrageous fortune, but another kind (el-bow)—which does not fail when we come to take some part in a festive feast like this. I think we get nearer to our fellow-men and become truer to ourselves. I think it was Patrick Henry who said, and I will say it with him: "Live or die, survive or perish, I give my heart and hand to the good fellows, the Hornets."

Dr. Jones, being called on to whistle, entertained the company in that way.

The little talk that you have heard from Dr. Jones I think will bear me out in placing the lines under his name: "Is it not true that I have some talent after all." We are glad to welcome Dr. Jones here. I believe this is his first appearance at an annual dinner of the Central Dental Association; we hope that he will always be here on these occasions hereafter. We have another gentleman

The Coast Master.

present in regard to whom I think we have aptly quoted: "It is my way to suffer no impediment, no love of ease, no avocation whatever, to chill the ardor, to break the continuity or to divert the completion of my literary pursuits." A gentleman whom we all know; who is now filling an editorial chair. I think those of you who have seen the January number, or the February number, of his magazine will agree with this quotation. It gives me great pleasure to call upon one of our honorary members, who has often been with us—Dr. Rodrigues Ottolengui, who will respond to the toast: New Journalism in Dentistry.

New Journalism in Dentistry.

Dr. R. Ottolengui. First, I want to say that I have no idea of introducing what is called "New Journalism" into dentistry. Secondly, I would like to explain exactly what kind of journalism I am endeavoring to promote in the magazine which I have the honor to conduct.

The new journalism of to-day is a kind of journalism with which I have no sympathy; it pretends to do everything for the public, but is absolutely and solely working for itself. For example, one of the new journals suddenly discovered that there exists a lot of hungry people in New York; just as though the entire population does not get up hungry every morning. This journal commenced to collect money for these hungry people, from persons who are known to give liberally to charity, and from everybody else who would give. The result has been very demoralizing. It is well known that the indiscriminate giving away of food is a bad thing; that the food never reaches the really worthy poor; and it has been so in this case. The United Charity Organizations have sent a circular letter to wealthy men who contribute to charities, asking them not to subscribe to this fund.

Nothing of that kind, if I can prevent it, will ever occur in our magazine. The president of the company that owns the journal followed me up into the mountains of New Hampshire to persuade me to become its editor. Then I said to myself: "They must want me pretty badly to take so much trouble; consequently I will make my own terms." My terms were that I should take the journal in trust for the dental profession; and I intend to run the journal on that line.

The Dental Journal a Dental College.

To-night a gentleman who is president of a dental college has spoken on the subject of dental education. Now, I have always had a secret wish to be connected with a college, but the colleges have not been as anxious to have me as I have been to join them, so I have never had that honor. Gentlemen, I have now been call-

ed to one of the most important colleges in the world of dentistry; a college which, when I took it, had six thousand students; a college to which we have added five thousand new matriculants, so that to-day we have eleven thousand students in this college. Now, am I wrong in calling our magazine a college?

It is the province of a dental journal to present the best current literature of the profession, and the best current literature is the progressive scientific advance in knowledge made by the dental profession. Consequently if a dental magazine teaches this new knowledge it is a post graduate school; its subscribers are its students; and the men who are kind enough to write the articles are the faculty. The man who occupies the position of editor is merely a machine that fashions the material which is sent to him to such form as shall best serve the purpose of educating the men who read the magazine. Now to this end I wish to say, as it is possible that some of you may send matter to me, that in such communications I shall take the liberty of removing the shell that we may reach the meat and the milk in the cocoanut as quickly as possible, for that is what we want, and all we want. This is not what I would call new journalism in dentistry, but rather new dental journalism. The new dental journalism purposes to represent the interests of the dental profession, and to be a sort of clearing house for the societies at large.

The Coast Master.

The gentleman whom I shall call upon next has a roving commission, a go-as-you-please privilege, for we know he will go right. It gives me great pleasure to call upon Dr. B. Holly Smith, of Baltimore.

Dr. B. Holly Smith.

I am reminded of the little boy who was taken from the streets of New York for a little summer outing in the country. He said that in the morning when the horn blew he noticed that the hands all came from work to breakfast, and at noon when the same horn blew the hands again came to the noon-day meal, and at night when the horn blew, another meal followed, much to his satisfaction; and when he was directed to his couch by the kind matron of the home he said to her: "Ma'am, if the horn blows in the night won't you please call me?" So I feel in reference to these annual banquets; whatever time the horn blows for these occasions I want to be called.

Formation of a National Society.

With reference to the organization of a National Dental Association, permit me to say that this Central Dental Association has always been foremost in promoting any new undertaking which would redound to the betterment of the dental profession,

and I presume that we will have its co-operation with other members of the profession, in an effort to establish a National Dental Association. You are familiar with the fact that there has been running through the two great dental associations of this country, embracing the different sections, a series of resolutions looking to the union of the American Dental Association and the Southern Dental Association. I had hoped that this object would be accomplished, but I am afraid it will miscarry. I have received a letter saying that the Executive Committee of the Southern Dental Association, which has been in pronounced antagonism to the proposed union, has changed the time and place of meeting of the Southern Association from Old Point, which probably means the defeat of the effort to unite these Associations. I only hope that some influence may be brought to bear upon their Executive Committee to induce them to withdraw their action, and if so, things would go smoothly in the direction of union, and we might have one great national association. No one will dispute the necessity of such a thing.

The suggestion of the editor of *THE ITEMS OF INTEREST* as to the introduction of dentists into the army and navy, raises an important question of legislation, as well as his view regarding dental patents. Now, all these things could be more successfully handled by a single National Association than they possibly can be while the profession is divided up, and when we come to be represented by such a national association we may accomplish something in these directions. What we need, is the organization of one central representative body. Let the edicts come from that central body; let the various dental associations in this country meet and take action, and charge their representatives in Congress to enact certain legislation, and I do not doubt that all the legislation that we desire would be enacted. The fact is that we are not organized. If the union between the American and the Southern Dental Associations fails at Old Point, I challenge you, gentlemen, you progressive men who have the interests of your profession at heart, to take up this matter; let us go to work and organize a National Association which will take in every section of this great country, an organization which shall hereafter stand at the head of our profession, from which shall emanate all the decrees, then the decrees will be effective.

Dr. Iredell is not here to respond to the toast,
The Coast Master. the New Jersey State Dental Society, and I will call on Dr. Sanger.

I shall not inflict a speech upon you at this late
Dr. R. M. Sanger. hour, although the toast is one to which I could talk all night. It seems to be necessary at every dental banquet to call for past history, and to call upon some past grand master

to say something to let you know that the present is not all there is of dental societies, or all that has been. That seems to me to be a sort of endeavor to hold back the dial of time, a sort of endeavor to make us feel young again.

The New Jersey State Dental Society needs no eulogium here. You are all familiar with it; you know that it stands pre-eminent among the societies of this great country; and I can only say, in place of the gentleman who was to have spoken to this toast to-night, that the New Jersey State Dental Society is proud to feel that in the Central Dental Association it has a child that has outgrown its mother; and, in closing this banquet, I would congratulate every one of you that you are members of the New Jersey State Dental Society and of the Central Dental Association.

(The company sings "My Maryland.")

Gentlemen, two members of our association
The President. have been called to their long rest during the year that has passed, and I would propose a toast to the memory of Dr. Brown, and the absent members.

(The toast was drunk standing.)

The election of officers was here taken up, resulting in the election of the following officers to serve for the ensuing year: President, Dr. W. L. Fish; Vice-President, Dr. F. Edsall Riley; Secretary, Dr. H. S. Sutphen; Treasurer, Dr. Charles A. Meeker; Executive Committee, Dr. F. G. Barlow, Chairman; Dr. Geo. E. Adams, Dr. W. E. Truex, Dr. G. S. Hardy and Dr. F. S. Gregory.





Second District Dental Society.

FEBRUARY MEETING.

The February meeting of the Second District Dental Society was held on the evening of the eighth at the residence of Dr. William Jarvie, a large number of the members being present and several visitors from New York. The essay of the evening was read by Dr. Ottolengui, and appears in full in this issue. Prior to the reading of the paper, Dr. Ferris related an incident of office practice which brought out an interesting discussion of cataphoresis, Drs. Van Woert and Rhein offering some valuable suggestions in connection with the prevention of leakage during the application of the current.

I wish to speak of a case successfully treated
Dr. Ferris. with the cataphoric apparatus. The patient came into my office in the morning, with a great deal of pain in a first bicuspid in the lower jaw. There was quite a large filling in the posterior approximal surface, which I removed. I applied an anodyne dressing, and the patient went out of the office. In about an hour she came back and said the twelfth year molar was aching. I found a filling in the masticating surface. I removed it and treated it in the same manner. Both teeth had been devitalized. She went home, but in the afternoon came in again and reported that the molar had stopped aching, but that the bicuspid had commenced again and was aching furiously. With my cataphoric apparatus I applied about one-fifth of one per cent. aqueous solution of tincture of iodine to the gum for about fifteen minutes under the bicuspid and under the molar. In about ten minutes after the application the pain ceased and she has had no symptoms of pain since.

Dr. Van Woert. I advise Dr. Ferris not to apply such treatment for fifteen minutes again.

Dr. Ferris. Why not?

Because you will produce a bad blister and per-

Dr. Van Woert. haps sloughing, and you *may* have the kind of trouble which one of our members had—a law suit.

Dr. Russell. I would like a report as to the failures of cataphoresis. I have heard of cases where it was applied to live pulps, and the patients commenced to dance.

Dr. Emerson. I use my cataphoric apparatus quite extensively. I have taken out pulps alive, and have had no failures except in two instances. In these, one of the teeth was filled with amalgam which I think prevented my medicament from entering the tooth, and in the other case the current did not go where I wanted it to go. My experience has been that in twenty minutes, certainly in half an hour, I can anaesthetize the pulp so that I can take it out without pain. I rarely need more than ten minutes to desensitize dentine. I used iodine once for about four minutes, and it appeared to have burned a hole in the gum. Now I never use it over two minutes. I get good results in two minutes with one-fifth of a milliampere and about six cells of the battery.

Dr. Hyatt. I have used the cataphoric apparatus and would not be without one. I would rather part with my dental engine than with my battery. I have had a great many successful cases; but as we have all heard of the successful cases, I will report one of the failures. I had a patient twelve years old. The tooth was a sixth-year right superior molar. It was one of those where the crown is not perfectly formed. I imagine it would come under the class of Hutchinson's notched teeth. I put on the rubber dam and applied cataphoresis in the way that I had heretofore applied it with almost monotonous success. This time I continued the current for twelve minutes, but when I started to excavate I could not do a thing. The tears ran down the little girl's face. I could not apply more than two-fifths of one milliampere without causing her intense agony. I started with two cells. Sometimes when a patient cannot endure two cells, he can endure six—why, I do not know. I find that the smaller voltage I have, the better success. I kept the current on in this case until an hour was consumed, but I could not excavate that tooth in any way with the finest or sharpest burs I had, or with hand instruments. I heated the cavity with hot air and painted it with four or five coats of carbolized resin, to which I am partial, and told the patient I would make an attempt again in three months. At the end of three or four months, I am sometimes able to excavate where I often cannot do it in the first instance. That is the first failure I have had in about six months' use of the cataphoric apparatus.

There is difficulty sometimes in damming three or four teeth for cataphoric treatment. I select a crown impression tray and take an impression where I want to dam the teeth; remove it, cool it, take the modeling compound from the tray and carve away the top of the impression. When replaced in the mouth this leaves a well around the cavities, and then I put the saliva pump in the mouth and relieve overflow of saliva. I use this in preference to napkins, where I cannot use the dam. The adaptation is so close that there is seldom any leakage. This is applicable for cataphoresis and all other treatments.

Dr. Van Woert. The result of my experience with cataphoresis up to the present time makes me say most emphatically that there is no excuse for any failure in cataphoresis, if it is feasible to overcome leakage into the surrounding tissues, or through some filling in the tooth. I have no record of any cases within a number of months where this has not been possible. I never think of doing any dental operation without adjusting the rubber dam, and I have no knowledge of any place on a live tooth, where it is not practicable to adjust the rubber dam. Having adjusted it, frequently leaks occur around the rubber dam that we are not aware of at first. Within the last few days I picked up a very good suggestion, but I do not remember just now to whom to give the credit for it. I saw it in one of the journals. It is to use soft oxyphosphate on the rubber, up around the margin of the gum. That will prevent leakage. Very frequently leakage will extend to an adjoining tooth that seems to be absolutely unimpaired, with perfect enamel and no sign of any cavity. Through some peculiarity of the structure, the current will have an affinity for that tooth and will travel in that direction. Although I may have the dam over four or six teeth, when I am ready to cataphorize the tooth, I take an extra piece of rubber and isolate that tooth to prevent leakage.

Discussion of Dr. Ottolengui's Paper.

Dr. Rhein. I think the author has struck a very profitable mine, but I cannot agree with him in his treatment in the case as shown in Figure 5. I do not like his restoration—that is to say so much contact. I think that is a mistake. I believe in the eclectic treatment of approximal spaces, and the use of judgment in regard to restoration. I do not know when I have found a cavity of this kind where, on carefully excavating the cervical margins, I did not find the dentine and the enamel borders softened. It is almost second nature with me to expect that I will not get good, hard, solid foundation until I get near the gum line. Dr. Ottolengui said that this

cavity (Figure 4) was properly filled on mechanical lines. He did not bring up the point which I wish to introduce, that this structure is very apt to be impregnated to such an extent, that it has not that hard, resistant feeling which we so well know when we have our excavator on sound tooth bone. It will invariably be easily chiseled away until we reach a proper foundation. Having prepared it in this way, if the general contour is made running from this margin up, with possibly a trifle more contact than is shown in Figure 4, the result would be correct. I see no advantage to be derived from such extensive restoration as is indicated in Figure 5. I would like to ask the essayist for his reason for criticising a restoration such as I have indicated—that is to say, first extending the cavity to the gum line, and then restoring original contour?

That brings out the point which I wish to make, **Dr. Ottolengui.** that by this rule "follow Nature," men constantly deal with the tooth alone, and forget to study Nature, at other points. Look at Figure 1. In the space which would exist if we took the gum away, Nature has built up soft tissue until the space existing between the gum and the contact point is very slight. In filling a tooth when the gum has receded, we should form the filling, so as to leave exactly the same amount of space and no more than we had originally. In such cases it becomes necessary to place the contact point lower down, and then to my mind it is essential to continue the contact throughout. I selected this type of case because of the normal divergence between the teeth. Wherever there is space, food will enter, and it is folly to suppose that it enters only from the masticating surface, although here we find that it would so enter, because the space at the palatal aspect is so broad. Food may pass in sidewise by the action of the tongue.

Dr. Rhein. In what way would you get secondary decay if original contour were followed from the gum line up?

Dr. Ottolengui. You would get secondary decay because you leave a lodging place for debris, which becomes pabulum for micro-organisms.

Dr. Rhein. How could you get secondary decay if you leave no surface of tooth to come in contact with the food; if your gold occupies all of the approximal surface, extending slightly under the gum?

Dr. Ottolengui. The putrefactive processes which would result from impaction of food would cause a continued irritation to the gum tissue, and we would hear that which we hear very frequently from patients: "Doctor, whenever I suck my teeth, they bleed." You would get that highly congested condition which generally results in recession. Micro-organisms would fill the

pockets and burrow down to where tooth substance is. The gum is to be considered as well as the recurrence of decay. If you leave a space for the lodgment of food, you will never get a thoroughly healthy tissue.

There is only one test by which to satisfactorily settle this question, and that is clinical experience. I have restored a number of teeth in the way Dr. Ottolengui advocates here, and all with most unsatisfactory results. I am completely opposed to this theory.

The point about filling teeth is simply this: The patient has his teeth decay and then comes to you to have them repaired. The first essential for the preservation of those teeth is to teach that person proper hygienic care of the mouth, and I do not think it is necessary to pass floss silk between properly contoured teeth. In the average teeth where the proper contour is restored, the passing of floss or rubber between the teeth, in order to cleanse them, I consider absolutely unnecessary and a proof that the work has not been done as well as it could be done.

The reason for my advocating as large a V-shaped space there as possible, is that my clinical experience has shown me that the larger the space, the more immune that contour is from any fresh attack of caries upon that surface. Patients should be instructed how to take care of such teeth. The brush, introduced either on the labial or palatal surface, with the proper sweeping curve, is bound to cleanse a large space. In cases where, through difficulties, I have not restored what was the original contour, but have produced a contact such as Dr. Ottolengui advocates, I have found that debris will produce the very detrimental results which the Doctor says are liable to result by my method. This because of the difficulty to remove the minute particles of fermentable substances that will get into these small spaces.

I agree thoroughly as to the form which the essayist would give to the occlusal ends of the fillings. When you can get a continuous straight line of biting surface for your filling, running from one tooth to another, it is a decided improvement over leaving the space. Where occlusion will permit, I close up any such spaces having the fillings meet in close contact.

San Francisco Dental Association.

Reported by CLYDE S. PAYNE, D.D.S., San Francisco, Cal.

The San Francisco Dental Association held its regular monthly meeting, Monday, March 8, at 406 Sutter street, the president, H. D. Noble.

in the chair. Dr. J. A. Black read a brief paper entitled "Excision of the Interior Dental Nerve," which appears in this issue. The following discussion ensued:

Dr. C. Ditchmiller.

From what did the ossification of the foramen result?

Dr. Black.

The patient was of rheumatic tendencies and aged 61. Two conditions, age and rheumatism, account for many bone changes.

Dr. E. Van Orden.

What do you think would be the effect of counter irritants in the canal such as trichloracetic, or some other acid in such strength as to mummify the nerves?

Dr. Black.

Such a suggestion was made to me by Drs. Goddard and Dr. Hipkins at the time we discussed the Brophy operation, but I think there would be some difficulty in forcing in the fluid, and it would be hard to limit the inflammation arising in such a confined place.

Dr. C. E. Goddard.

It seems to me that Dr. Brophy regarded this canal as a bony tube in which, when its contents were removed with its lining and the one irritated, enough plastic material would be thrown out so that the tube would be obliterated. Eventually true bone formation might be expected.

Dr. F. L. Platt.

I wonder if the canal could be followed where it is partly obliterated.

Dr. Black.

I think that condition would be more often the exception than the rule. In such a case a modified Garretson operation could be performed, using the flexible hand drill after the bone of the narrowed canal had been trephined away. The main idea is to disturb as little tissue as possible and leave no external scar.

Dr. E. Van Orden.

Does Dr. Brophy recommend the use of the Gates-Glidden drill? It seems to me that such an instrument made in proper size and flexible could be used.

Dr. Black.

Dr. Brophy's instruments are somewhat gimlet shaped at the point and have a tendency to impinge on the edge of the canal lines. It seems to me they would keep the line of the canal better were the bulb pointed, or at least somewhat duller on the point. It also seems to me that the point should not be tempered, but should be perfectly flexible.

Dr. E. Van Orden.

What would you do if an instrument broke off in the canal?

Dr. Black.

That would be unfortunate. One could do nothing except to cut down and remove the piece.

Dr. G. Ditchmiller.

(To Dr. Goddard). What do you think the result of such an operation, would be upon the remaining teeth?

Dr. Goddard.

That is a question I will answer by quoting two authorities as to the origin of the nerve nutrition of teeth. Drs. Sudduth and Brophy say there are no direct connections. That the nerve tissue of the pulp, when reaching the foramen spreads out into minute branches and is lost. According to Dr. Sudduth the nourishment conveyed through capillary attraction would not occur.

Dr. Pague.

To bear out Dr. Goddard's remarks, I think if you refer to the records of accident, where the inferior maxillary had been broken in two or three places, and the nerve undoubtedly separated, you will find that very few of the teeth have ulcerated after the jaw healed. Teeth involved in the fracture would be undoubtedly devitalized. From this standpoint I would be led to believe that the inferior dental does not supply all the teeth directly.





Theory versus Practice.

Treatment of Retained Temporary Teeth.

The following very entertaining discussion of a subject, upon which very little has appeared in our literature, has been brought forth through the presentation by Dr. C. Edmund Kells, of New Orleans, of a model showing a portion of the lower jaw in which appears a tooth of peculiar shape. (Figure 1.)

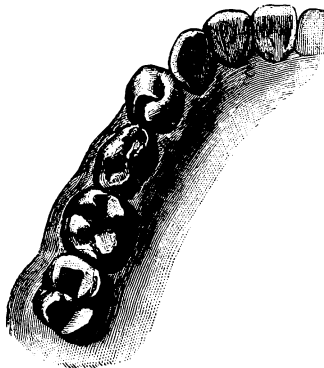


FIG. 1.

The following letter was sent, with the cast, to the various contributors to this department:

"The accompanying cast is submitted by Dr. Kells, of New Orleans. It is taken from the mouth of a patient a little more than fourteen years of age. The question is, whether the tooth which occupies the position of the second bicuspid, is a permanent tooth, or whether it is a retained temporary molar. Will you kindly express your opinion on this point, and if you decide that it is a temporary molar, would you extract it?"

This query from Dr. Kells introduces a very interesting question which we would like to have freely discussed, and I will therefore ask you

to let me have an epitome of your experience in connection with retained temporary teeth.

Where the tooth is sound, and apparently firm in its socket, it is often a difficult problem to decide whether or not to remove it. What has been your practice in this connection? Have you removed such teeth with any invariable result? That is to say, where you have removed them, have the second teeth always appeared? And is there any limit of age beyond which you would hesitate to perform such extractions?"

Dr. Hofheinz
Reports
Interesting Cases.

The tooth appears to me to be a deciduous molar, although I have seen second bicuspside of this peculiar shape.

If it is a deciduous molar and perfectly formed, and there are no certain indications of the second bicuspid, I should be in favor of leaving it in the mouth.



Fig. 11.

I have had numerous cases in my practice. In one instance, a lady thirty-eight years old wears an artificial crown, on a lower deciduous molar, which I inserted about seven years ago. The tooth now is beginning to loosen.

It would be interesting if Dr. Kells would ascertain whether this condition is found in other members of his patient's family. I have two interesting cases showing such heredity.

In the first family, the elder daughter lost the lateral incisors when fourteen years old; the permanent teeth never appearing to replace them. A younger daughter kept the temporary incisors because she was apprehensive of a similar experience. She is now thirty years old, has lost one of the temporary incisors, while the other is still in position, but no permanent laterals ever appeared.

In the second family, there are seven children, three of whom have never had second permanent bicuspsids; two having lost the deciduous

teeth at the proper time. A daughter fourteen years old has the deciduous teeth still in place, but will lose them soon.

I send you a cast (Figure 2) of a lady thirty-four years of age, the left deciduous molar being still firmly rooted. Destroyed and removed the pulp two and one-half years ago; everything at the present time is normal and healthy.

When deciduous teeth have remained firmly in place beyond the proper period, with no indication of the permanent incisors, a puzzling problem is usually presented.

R. H. Hofheinz, D.D.S., Rochester, N. Y.

Dr. Goddard I think the tooth is a deciduous molar, though
Enunciates a it is very narrow for a temporary second molar.
Rule of Practice. Where a deciduous tooth is sound and firm in
 its socket, it has been my practice to allow it to remain, unless a successor has appeared, or is about to appear beside or near it. I have seen some cases where such teeth were extracted, and the expected successors failed to appear for several years, if at all. I consider a deciduous tooth which is sound and firm, as good for mastication as a permanent one. Very few of our patients can distinguish between them.

As a permanent lateral incisor is often suppressed, I should never think of extracting a deciduous lateral unless its successor had appeared, or showed by the fullness of the gum that it was sure to appear.

The rule which I often teach students in Orthodontia is, "Never extract a deciduous tooth unless it deflects its successor, or otherwise is the cause of an incurable abscess."

C. L. Goddard, D.D.S., San Francisco, Calif.

Dr. Jarvie The query is whether the tooth in question is a
Explains permanent one which has replaced a second temporary molar.

Third Dentition. We are not informed as to the color of the tooth
 in situ, an important fact in making a diagnosis, but judging by the model, I believe the tooth to be a permanent bicuspid. Judging from the teeth shown in the model, I should imagine the second temporary molar must have been a well developed tooth, whereas the tooth in question, though as long as a temporary molar, is not more than half the required thickness. Holding this opinion, of course I would not extract it.

Where a temporary tooth has been retained for several years beyond the time when it should have been lost, and where it is sound and apparently firm, I should hesitate to remove it. If the gums are full and

well rounded, it may be that such crown is partly held in place by the adjacent teeth, and the permanent tooth is thus prevented from erupting by the immovability of its temporary predecessor. In such a case, I should extract the temporary tooth. But where the gum is depressed, seemingly indicating that the permanent tooth is not in the alveolus, I should use every means to retain the crown of the temporary tooth, even though its roots had been absorbed.

I have extracted temporary teeth at eighteen years of age, and the permanent successors have made their appearance in due time, but I have never known permanent teeth to erupt after any retained temporary teeth have been removed, in which the gums did not indicate their presence by a fullness in the proper region.

I think there are few cases in which permanent teeth have been entirely absent from the jaw.

Many so-called cases of third dentition are only retarded eruptions of permanent teeth, caused by the gradual attenuation of the alveolus. I have seen many cases where wisdom teeth have appeared, when middle aged or elderly people have been wearing full dentures. Recently one of my patients, fifty-five years of age, erupted a superior second bicuspid, none having formerly appeared on that side of the jaw.

Wm. Jarvie, M.D.S., Brooklyn, N. Y.

<p>Dr. Geran Cites Cases from Practice.</p>	<p>I would say that the tooth which occupies the position of the second bicuspid, is a retained temporary molar, but whether it be a deciduous tooth or a permanent one, it is abnormal in shape. My experience teaches me that one is generally safe to extract in such cases.</p>
--	---

Many years ago, I submitted a similar case to Dr. Atkinson and he advised extraction, this having been invariably his practice. I acted upon his advice with fortunate results. Since that time, I have followed this rule, the patient permitting it.

It is a strange coincidence that, when I received your letter, I had a patient in my chair twenty-six years of age who had a retained temporary molar in exactly the same location. Six years ago, I advised extraction, but she would not submit on account of the space which it would leave. Now, after a careful examination, I find that the permanent tooth is under the deciduous one, and I intend to extract the latter.

I recollect only one case in my practice where the permanent tooth did not appear after the removal of the retained temporary tooth.

I have a gentleman, who, when he first came to me, had a retained cuspid. At the age of twenty-five, his dentist had refused to remove the tooth, it being very firm in the socket. At the age of thirty-five, his dentist still refused to remove it. At the age of forty-six, he fell into my hands. I found the tooth loose, removed it, and the permanent tooth erupted, though very slowly.

Non-eruption of the permanent tooth may be from either of two causes: non-absorption of the roots of the deciduous tooth, or the too perfect occlusion of the deciduous tooth.

Dr. J. P. Geran, Brooklyn, N. Y.

Dr. Farrar
Seldom Extracts
Temporary Teeth.

The tooth appears to be a double bicuspid, and abnormal whether it be a bicuspid or a deciduous molar.

I have a woman patient fifty years of age who has just such a tooth in fairly good condition.

I never extract a firm deciduous molar after the eighteenth year, unless I feel quite sure that there is a permanent tooth under it which would rise if at liberty to do so. A horizontally poised tooth would contra-indicate extraction. There are many cases where there are no successors to deciduous teeth. There are no cases requiring clearer diagnostic judgment than these.

J. N. Farrar, D.D.S., New York, N. Y.

Dr. Baker
Recommends the
X Ray.

In the model submitted by Dr. Kells, only one-quarter of the teeth in the lower jaw are represented, which makes it more difficult to form a conclusion, but presumably the remaining teeth are normal. In that case, it would seem that the tooth in question

is a retained temporary molar. Whether to extract or not, would depend upon the conditions. Is there a bicuspid ready to erupt and take the place of the extracted tooth?

The only sure way to determine is to make a sciagraph; then one can reply positively. The Roentgen ray would tell the story.

If there is no tooth ready to erupt, it would be best to wait and let well enough alone. I have never found any invariable rule, which would apply to these cases; each one seems best treated according to its attending conditions.

H. A. Baker, D.D.S., Boston, Mass.

**Dr. Essig
Expresses his
Opinion.**

I would not hesitate to say that the tooth is a retained temporary molar for this reason: I have never seen a permanent second bicuspid tooth differing so greatly as this does in form, from its immediate neighbor, the first bicuspid; that is an indication which I look upon as infallible; were it a permanent tooth, it would not differ so much in shape. At least I have never met with anything of the kind.

I have known deciduous molar teeth to be retained until the thirty-fifth year of age, and where I have met with such cases, so long as the tooth remained firm and sound, I have not extracted it, because there is always some uncertainty about the advancement of the permanent tooth. My plan has been to allow it to remain until it becomes somewhat loosened, or until there are signs of the approach of the permanent bicuspid.

I have in mind at this time one case in particular, where a deciduous inferior canine was retained until the patient was twenty-nine years of age. I had semi-annual examinations of the patient's mouth for some years, and not until he was nearly the age I have mentioned did I notice any loosening of the tooth. The loosening, however, progressed so that he was obliged to lose the tooth, and in a year or so after that, the permanent canine made its appearance and erupted very slowly for two or three years, when finally it may be said to have assumed its proper place in the arch.

There is, however, always uncertainty as to whether the second tooth will appear, and for that reason I would allow a belated temporary tooth to remain until there were unmistakable signs of the advancement of the permanent tooth.

My remarks about the form of the tooth being an infallible indication of whether it is permanent or temporary, must not, of course, be understood as applying to cases of supernumerary teeth, as they have a form characteristic of themselves, and always differ from the ordinary temporary or permanent teeth; but between a belated temporary bicuspid and a regular permanent bicuspid, the question of form, it seems to me, would be an infallible means of distinguishing.

Chas. J. Essig, D.D.S., Phila., Pa.

**Dr. Jackson
Presents an
Interesting Case.**

I am of the opinion that the tooth is a malformed bicuspid. I base my opinion on the following: First, the age of the patient, being fourteen years; the second, deciduous molars are generally lost when the patient is between ten and eleven years

of age, and there is but a comparatively small percentage of cases, wherein they are retained after the thirteenth year.

Second. The crowns of the deciduous teeth, including the second molars are to a large extent developed pre-natal, or before birth, and have a full rounded form, even in cases lacking materially in lime salts; variation from the normal type is uncommon, although cases are occasionally seen.

Third. Cases with mal-formed lower bicuspid are not especially uncommon.

Regarding the extraction of the deciduous molars, it is my custom to retain them in place as long as possible, whether the dental pulp is living or dead, until there is positive evidence of the presence of the succeeding bicuspid. It is then also essential, before extracting the deciduous molar, to determine whether there is likely to be a tardy development

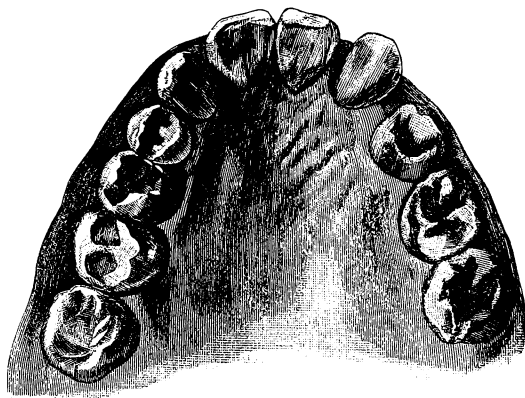


Fig. 3.

of the bicuspid, otherwise, were the molar removed, the bicuspid might become impacted by the settling together of the adjacent teeth.

I have seen quite a number of cases among persons of mature age wherein the second bicuspid had never appeared. I send you the models of Miss F., aged twenty-two, for whom I am operating this week. (Figure 3).

None of the second bicuspid, nor either of the superior lateral incisors has erupted, and the process is not developed as it would be were they present. Three of the second deciduous molars are absent, but the second right superior deciduous molar is still retained, the pulp being dead, having a filling in the canal and crown. The gum has become separated from the roots on the buccal side, but by probing I cannot discover the presence of a bicuspid.

It is interesting to note in the case of Miss M., aged twenty-three, a sister of Miss F., that neither of the lateral incisors in the superior arch has erupted, but all of the bicuspid are in place, and the left superior deciduous cuspid is retained with the permanent one in front of it. In the case of Miss M. as in the case of Miss F. the right superior cuspid had erupted inside of the circle of the lower arch requiring it to be moved forward and outward.

V. H. Jackson, D.D.S., New York, N. Y.

**Dr. Rhein Relates
a Very
Instructive Case.**

It is impossible, from the cast alone, to decide whether the tooth is a permanent bicuspid or a deciduous molar. Consequently I cannot express an opinion in this particular case.

In regard to the general query as to my indi-



Fig. 4.

vidual opinion and practice in connection with retained temporary teeth, I would state that at the present time, with the advantages offered to us by means of the Roentgen ray, it becomes a very simple matter to ascertain whether the permanent tooth is in the maxilla.

If it is positively determined that the permanent tooth is imbedded in some portion of the maxilla, the removal of the deciduous tooth should be immediate, and effort should be made to bring the missing tooth into its proper position.

If, on the other hand, the picture of the interior of the bone shows one of those very rare cases where there is an absence of the permanent tooth, the preservation of the deciduous tooth should be the general rule.

In the past, when we have not had the aid of electricity to show to us what may be concealed beneath the periosteum, it has been my prac-

tice, when in doubt, to extract the deciduous tooth, because the percentage of cases where the permanent tooth cannot be found is very small, and the danger of ultimately injuring the permanent tooth by permitting its eruption to be delayed is very great.

In the large majority of retained deciduous teeth the temporary organ is retained because it becomes so firmly impacted between the adjoining teeth that the permanent tooth cannot force it out of the alveolus. The result, in children of good bony development, is that frequently the permanent tooth is rotated, in its efforts at eruption, and often commences traveling through the cancelous portion of the maxilla. To illustrate such a result I send you a cast of a woman aged thirty-two. The teeth are very near the ideal type. They are all in perfect position, and the occlusion is correct, with the exception of the second superior right bicuspid. (Figure 4.)

The dentist having charge of this patient was a celebrated practitioner, and allowed the sound temporary molar to remain in position until the patient was nearly eighteen years of age. His theory was that the longer the permanent bicuspid was retained in the jaw the better condition it would be in to withstand the wear of life when finally allowed to assume its place in the oral cavity.

He was a very disappointed man when the bicuspid finally made its appearance turned completely on its axis so that the approximal sides of the tooth are in the position of the buccal and palatal surfaces. This case was made much worse by the fact that although he made strenuous efforts to rotate the tooth into its proper position, he failed, and the patient finally refused to submit to further interference. The buccal and palatal sides have succumbed to caries, in their abnormal position, and this tooth is now the great defect of the mouth.

The dentist assumes a grave responsibility in advising the retention of a deciduous tooth beyond the time when its successor should make its appearance.

M. L. RHEIN, M.D., D.D.S.

New York.

**How Dr. Kells
Solved
the Problem.**

The case illustrated by the accompanying cast and sciagraph is an interesting one, because when shown to a number of my confreres there was a divided opinion as to its being a temporary molar or permanent bicuspid.

The patient not having been under my care from infancy I had no record or consequent knowledge of the history of the tooth, and I have found that but little faith can ever be placed upon what a patient says, or if the patient be a child, the patient's parents say, in regard to such matters. They may mean well, but they seldom know anything of the mat-

ter, and in consequence what they say can have no weight. In cases of which this is a type, in which there is a tooth occupying the place of the second bicuspid, and which tooth is almost identical in shape with a temporary molar, and yet quite firmly set in the jaw, we have been until quite recently practically at sea as to what course to pursue, for whatever we decided was practically guess work, and the only way to prove the character of the tooth would be by its extraction.

Now, however, by the practical application of the Roëntgen ray, a perfect picture of the root of the tooth in question may be had, and thus the question may be definitely and satisfactorily settled.

In this instance the one single root of the tooth was well brought out in the sciagraph, thus proving it to be an abnormally shaped permanent second bicuspid. (Plate III., Fig. 3.)

The decision of what course to pursue, whether to extract or retain temporary teeth which are still sound and firm several years after the time for their loss, is sometimes extremely difficult.

This, in my experience, applies principally to the cuspids, as they seem to be the ones more apt to be found in this condition than any of the other teeth. My practice has been to examine the process of the temporary tooth most minutely, and if there was the slightest protuberance above the cuspid, either under the lip or on the palatal side, to conclude that the permanent cuspid was there, and extract the temporary tooth, and I believe I have invariably found the cuspid would then come down to the proper place.

However, I have never done this for a patient over fifteen or sixteen years old. When a temporary cuspid or usually the pair of them were found in a patient after that age, I concluded to nurse them along and only permit their loss when all further attempts to save them were futile.

I have now several patients who have one or more temporary cuspids at the ages of from twenty-five to forty-five.

Some time ago a lady, certainly over thirty, showed signs of an upper cuspid's eruption, the temporary one having long before been lost, and the lateral being in contact with the first bicuspid.

To make the necessary space for the new tooth the bicuspid was extracted, and the cuspid came down in place in about a year.

The application of sciagraphy is of the utmost benefit in all cases of retention of temporary teeth, or of unerupted teeth, as by this means a positive diagnosis can be made and absolutely scientific treatment take the place of, what would be without it, pure guess work.

C. EDMUND KELLS, JR., D.D.S.,

New Orleans, La.

**Dr. Ottolengui
Expresses His Views
on the Subject.**

The discussion which has been brought out through Dr. Kells's little problem has proven so interesting that I cannot refrain from contributing my quota. In the matter of retained temporary teeth in this particular locality the following incident of practice may be worthy of relation:

Miss S., age twenty-two, called upon me complaining of an aching tooth. It proved to be a retained left inferior temporary second molar. The tooth was decayed, but firm, and after failing in my efforts to allay her suffering I removed the tooth, when, to my surprise, I found the roots of full size and in nowise attacked by absorption. With a bone bur I drilled away a sufficient portion of the socket to have released any impacted permanent tooth which might have been present, but I found none. I therefore filled the canals of the temporary tooth, and replaced

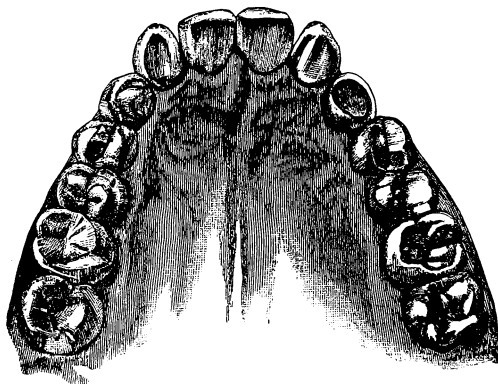


Fig. 5.

it in its socket. A year later I removed the temporary filling from the cavity and inserted a gold filling. Five years after the tooth was still firmly retained.

From all of the theories advanced above one instructive fact may be deduced and should henceforth be recorded in our memories for recollection when diagnosis is needed.

Dr. Hofheinz reports two cases in one family where the superior lateral incisors are absent from the permanent set. Dr. Goddard claims that the laterals are often missing. In Dr. Jackson's case, of which we have an illustration, the laterals are absent, and he, like Dr. Goddard, reports two members of one family, both of whom lack these teeth.

We may safely formulate this rule: Of all the teeth in the human mouth the superior lateral incisors are most frequently missing, not alone from the arch, but from the jaw.

Lombroso has noted the absence of the lateral incisors, and claims that it is a stigma of degeneration, absent laterals and prominent cuspids marking the hereditarily immoral woman. This claim is worthy of a little analysis. Lombroso is one of those enthusiasts who set up a theory and then endeavor to shape statistics so that they may substantiate their views. We may admit that among a thousand prostitutes the proportion of women having no lateral incisors is much greater than among an equal number of virtuous women. Yet it does not follow that the absent lateral is indicative of an immoral temperament. After all immorality is a social, not a physical disease. The truth probably lies in the fact that syphilis is more common among prostitutes than among wives, and I do not hesitate to say that a not uncommon heritage from syphilitic ancestry is the absence of both superior lateral incisors. I do not, however, wish to be understood as claiming that all such cases have this origin, for I can cite several where the heritage is absolutely beyond suspicion.

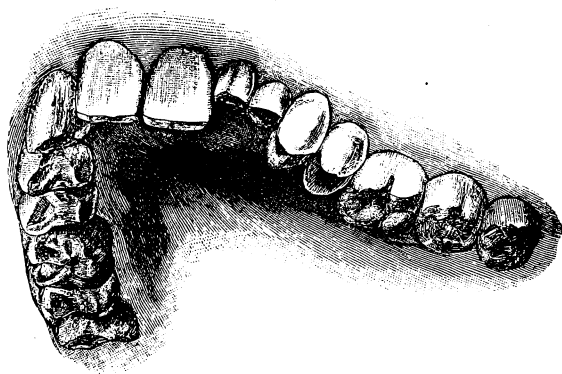


Fig. 6.

A most interesting case of this character is shown in Figure 5. Here we see that the temporary laterals were lost and were not replaced by the permanent successors. Thus spaces were left. By a curious chance the temporary cuspids resisted absorption so that their roots deflected the cuspids, which consequently occupy the position of the lateral incisors, the anomalous result being that both the temporary and the permanent cuspids are present. Unfortunately the temporary cuspids have become badly worn, and are now "cupped out." It was my hope to publish a sciagraph of this case, but though the film satisfactorily proved that the laterals are not in the bone, the pictures are not clear enough for half-tone reproduction.

Another case in which the heritage is unimpeachable is that of a

man, aet. twenty-five, in whose mouth (Figure 6) we find on one side a retained lateral and cuspid of the temporary set, while on the other the permanent lateral is absent, and the cuspid is consequently adjacent to the central incisor.

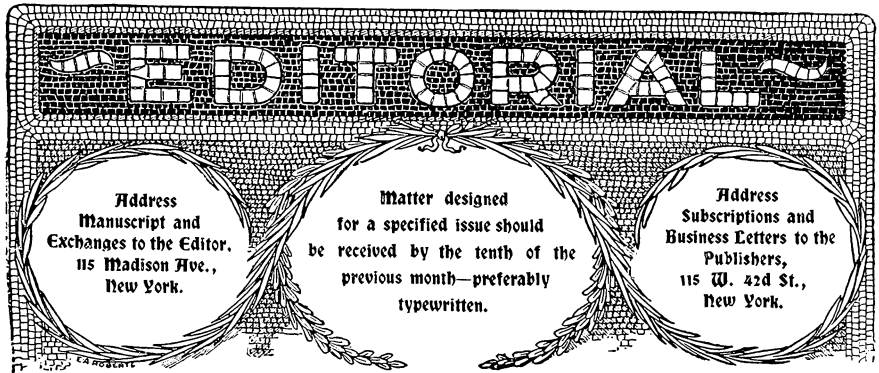
Dr. W. J. Morton very kindly took two sciagraphs of this mouth for me, one of which is reproduced herewith. (Plate III., Fig. 4.) Through the assistance of the Roentgen ray in this case again we find that the laterals are absent, but the impacted cuspid is beautifully shown, lying almost horizontally. There is not the least fullness in the mouth to indicate that this tooth is in the jaw, so that here at least we have an exception to Dr. Jarvie's rule that we may depend upon a fullness of the process where the tooth is in the jaw.

In connection with this sciagraph it is interesting to note how clearly the fillings in the teeth are shown, as well as the root filling in the retained lateral incisor.

Another rule which I think it would be reasonably safe to formulate would be to the effect that the cuspids are usually impacted in the jaw bone if absent from the arch.

We should therefore, in the absence of certain knowledge, hesitate to remove retained lateral incisors, because their retention usually indicates that their successors are non-existent. Retention of temporary cuspids, however, probably results from impaction of the permanent teeth.





The Roentgen Ray in Dentistry.

This latest discovery of science, the extraordinary electrically evolved light which has the power of penetrating objects hitherto considered impenetrable by any light, was nominated the X ray by its modest discoverer. He called it the X ray, because in mathematical science the letter X is commonly used to represent the unknown. But within a more or less brief period probably as much will be known of this as of any other phenomenon of electricity, and as it is destined to prove to be one of the most important scientific discoveries of any age, it is but proper that the tentative term X ray should be abandoned immediately, in place of which what name could be more appropriate than the Roentgen ray? Thus the scientific world may honor him who has placed a new force at its disposal.

It would be impossible to designate a date at which we might say correctly that "photography was discovered," but we may reasonably claim that the earliest practical methods of producing pictures by photographic processes were introduced by Niepce, though his partner, Daguerre, has received most of the credit, having shrewdly incorporated his name in the word which was coined to express his process. The word Daguerreotype is known to all, and the peculiar

The Discovery and Progress of Photography.

pictures themselves, on polished metallic surfaces, will be remembered by many persons still alive. Niepce disclosed his secret to Daguerre and formed a partnership with him in December, 1829. Describing this process subsequently Daguerre said:

"The time required to procure a photographic copy of a landscape is from seven to eight hours, but single monuments, when strongly lighted by the sun, or which are very bright themselves, can be taken in three hours."

What progress has been made! From the Daguerreotype, which required an exposure of several hours, to the kinetoscope, which shows a succession of photographs, taken in such minute fractions of a second that the machine enables us to see a realistic representation of actual motion! Then there is another marvelous achievement of photography which is not so well known, because as yet it has not been used for popular amusement.

**Photographing to
Reproduce
Natural Colors.**

Many have been the efforts to procure photographs in lifelike color, but as yet with but little success, a chief obstacle being the apparent difficulty of printing the colors, as well as the fact that the colors of nature are produced by the sun, whereas the color on the photograph, if ever produced, would result from diffused light.

A process, however, of reproducing the coloring of nature in a picture has been made possible by utilizing the negative, not for printing, but as a slide in a stereopticon. Three negatives are taken, a color screen being interposed between each, and the object, during the exposure. The screens used are usually red, blue and yellow. For the projections a specially devised lantern has been invented, having three projectives, before each of which may be interposed a color screen. The negatives are used as slides, and before each is placed the same colored screen as was used during the original exposure. The light being projected on the canvas, the three negatives being focused so as to produce one picture, the result is a perfect representation of the object in its natural colors, as bright as the coloring of Nature, because the light is transmitted.

These wonders of photography have resulted from over half a century of investigation and labor.

**What the
Roentgen Ray
Has Accomplished.**

Our knowledge of the Roentgen ray sciagraph is scarcely two years old, yet what immensely valuable achievements have already been recorded. If this class of photography should make the same progress in the next fifty years as has occurred with that depending upon sun rays, where will we be in another half a century? Already the sensitive plate discloses the hitherto invisible recesses of the body, and the condition of the bones especially are readily recognizable on the films and photographs. For purposes of diagnosis, the physician is to-day depending so much upon the Roentgen ray, that in this city specialists are making a business of sciagraphy, and there are even several studios managed by laymen who find that they have a new and lucrative business.

But what can the sciagraph do for our own profession? In this number of *ITEMS OF INTEREST* there is an intimation. Dr. Morton's wonderful skull picture, showing the bones of the head, and both the temporary and permanent teeth, is a wonderful curiosity. The sciagraphs for the department of Orthodontia are of more practical value and equally wonderful. But after all the sciagraph in its present undeveloped form can aid us but little. The presence or absence of a tooth in the jaw is not a matter of vital consequence.

**What May Be
Expected
in the Future.**

But a prophecy as to the future may be ventured. Let us suppose that the time is not distant, when we may have sciagraphs taken through color screens, as in the above described process of procuring photographs. Then, with a three nozzle lantern, we may obtain a colored reproduction of the object which is under investigation. By that time we shall have learned exactly to weigh the evidence which is disclosed by the depth of color or shadow.

For example, though bone is said to intercept the ray, we find that the bone of the alveolar process transmits the light sufficiently, so that the bone of the tooth, which does not so readily transmit it, casts a shadow. Thus, while elsewhere in the body we obtain pictures of the bones, here we get a picture of a bone within a bone. It is equally certain that soft tissues must transmit the light in differing degrees of resistance, so that the time may come when, with more sensitive films, we will have sharper

shadows, and may get true representations of the soft as well as the hard tissues.

In this manner we shall be enabled to see not only the root of the tooth, but the pulp within the root canal, and to tell whether it be in a state of life or death. Even now the light shadow in the sciagraph of Dr. Kells tells us that the pulp chamber is occupied by soft tissue, while in the sciagraph of Dr. Morton, showing the two retained temporary teeth, the root filling in one is plainly discernible.

But we may anticipate the time when the pictures will show us abscess sacs on the ends of the roots, necrotic and carious bone; and of more importance because of the present difficulties of diagnosis and treatment, we may hope for pictures of the antrum which will disclose the outlines of the cavity, with shadows from which we may know whether there is pus or not, and whether fungoid growths are present. Moreover, if the color pictures become possible, we may be enabled to know the nature of these growths, whether malignant or otherwise.

In the meanwhile the experimentors may well make a study of the importance to be attached to the depth of the shadows. In certain classes of photography we have special plates now by which we may obtain what is technically known as "color value." We should hasten in sciagraphy to obtain and appreciate "shadow value."



The Editor's Corner.

When our meeting in the White Mountains was first projected, we were desirous of holding it during the week following

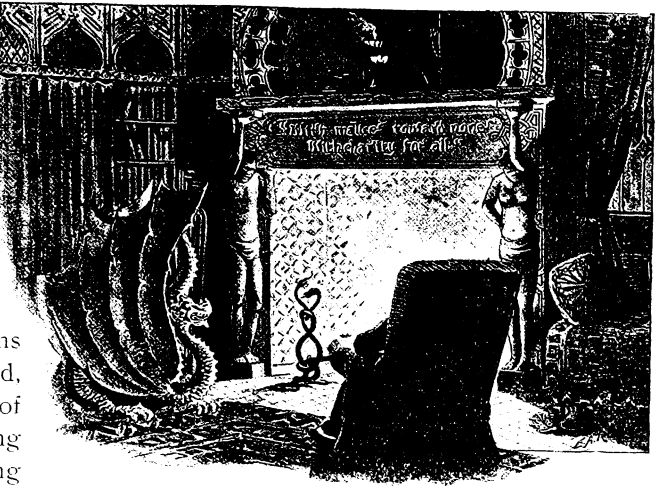
the meetings of the American and the Southern, but this proved to be impossible. The season in the mountain region is a brief one, and during August the hotels are so crowded with guests that there would be no room for so large a number as we expect to have in attendance, and no reason why the hotel-keepers should consent to a reduction in their rates. In granting a special rate, the hotel management stipulated that the meeting should be in July.

Change of Date for Mountain Meeting.

It was then decided to hold the meeting during the week of July 19th, so that those who wished might have two weeks in the mountains before starting for the Old Point Comfort meeting. Now it is discovered that the New Jersey State Society meets during the week of July 19th, and a great many have requested that we delay our meeting, so that they may attend both. We have therefore decided to hold the meeting during the week beginning July 26. From present prospects a large delegation of men from New York and vicinity will go to Twin Mountain. For the comfort and pleasure of these we wish to know in advance just who will go, and it will be arranged so that all may start together on the White Mountain express, leaving New York on Monday morning. The full schedule of this train will be published next month, so that all who desire may join this party *en route*.

Special Rates at Twin Mountain Hotel.

The regular rates at the Twin Mountain Hotel are four to five dollars per day, and the accommodation and table service are in keeping with these prices. The following rates, therefore, are a great concession and afford a rare opportunity to visit this charming region. To all who attend our meeting, including ladies, the



rate will be as follows: For one person, in separate room, three dollars per day; two persons in one room, five dollars per day. To all who engage for the full week regardless of how many room together, two dollars per day each. These rates will be good to end of the meeting, and the rate by the week will be accepted from July 1st, where persons desire to spend one or two weeks at the house prior to the meeting.

Supreme Court

Sustains

Dental Examiners.

A case of great interest to the dentists of California, and of importance to the whole profession, through its erection of a precedent as to the legal powers of State Boards of Dental Examiners, has just been finally disposed of by the Supreme Court of California, the decision being forwarded to us by Dr. Clyde S. Payne.

John D. Van Vleck made application for a license to practise, claiming to be a graduate of the American College of Dentistry, of Chicago, Illinois, and further: "that desiring to practice his profession in this State, petitioner, on the 10th day of May, 1894, in pursuance of said act, presented to defendants his said diploma, and demanded that they endorse the same and issue to him a certificate to that effect; that when said diploma was issued, and at the time of the application to defendants, said American College of Dental Surgery "was a reputable college, and there existed and was at the command of defendants sufficient evidence of such fact;" that with his application petitioner furnished "evidence satisfactory to the defendants that he was the person named in said diploma, and that the same had been issued to him as stated in said diploma." That defendants, "without any lawful right or excuse therefor, refused to endorse plaintiff's said diploma, or to issue to him the certificate provided for in said act."

The act referred to, which underlies the proceeding, makes it unlawful for any person who is not at the time of the passage of the act engaged in the practice of dentistry to engage therein, unless he shall have obtained a certificate as thereafter provided; it authorizes the appointment of a board of examiners, to consist of seven practising dentists, "whose duty it shall be to carry out the purposes and enforce the provisions of this act." After providing for the constitution and organization of the board, and for the registration of all those practising dentistry in the State at the date of its passage, it provides:

"Section 5. Any and all persons who shall so desire may appear before said board at any of its regular meetings, and be examined with reference to their knowledge and skill in dental surgery, and, if the examination of any such person or persons shall prove satisfactory to said board, the board of examiners shall issue to such persons as they shall find to possess the requisite qualifications a certificate to that effect, in accordance with the provisions of this act. Said board shall also endorse as satisfactory diplomas from any reputable dental college, when satisfied of the character of such institution, upon the holder furnishing evidence satisfactory to the board of his or her right to the same, and shall issue certificates to that effect within ten days thereafter. All certificates is-

sued by said board shall be signed by its officers, and such certificates shall be *prima facie* evidence of the right of the holder to practise dentistry in the State of California." The further provisions of the act are not involved.

The contention of the Attorney-General, for appellants, is that the functions of the defendant board under the statute are judicial or *quasi* judicial, in that they involve the exercise of discretionary power—the determination of facts from evidence; that the determination of such facts is exclusively and finally vested in said board, and that therefore, while mandate will lie to require it to act, should it refuse it will not require it to proceed to a particular conclusion; nor where it appears, as the complaint alleges, that it has acted and reached one result, can it be coerced by this writ to act differently.

The correctness of these principles, if such be the proper interpretation of the powers vested in the board, is conceded by respondent, but respondent contends that the act will not bear such construction. His contention in effect is that the power vested in the board is largely ministerial, or clerical merely; that, while the board has certain discretionary power to pass upon the facts upon which its action is to be based, its determination of those facts is not final; that, if the evidence presented to it is such that in the judgment of the court the board should have found in favor of the existence of the facts authorizing it to endorse the certificate, it can be required to so find and make such endorsement.

We are unable to coincide with respondent's construction of the act. The whole theory upon which it proceeds, and the manifest purpose intended to be accomplished thereby, are against such construction. It is very evident, as indicated not only by the title but in the body of the act, that the inducing consideration moving the Legislature to its adoption was the protection of the public against the ills suffered at the hands of incompetent quacks, empirics and other unqualified practitioners in this most important and essential branch of modern surgery and medical science. Until within a comparatively recent period the practice of dentistry consisted of treatment largely, if not exclusively, of a mere mechanical nature, such as drawing, filling and cleaning the teeth; and practitioners of the art were neither required nor expected to know anything of the pathological features or surgical necessities of those diseases which rendered their artisanship a necessity to man's relief and comfort. Indeed, the local dentist was frequently the village barber or leech, the watchmaker or even the blacksmith—any artisan possessed of a convenient, if not suitable, instrument and the necessary strength to pull a tooth. In more recent years, however, the necessity for a higher and special education in the art and science of treating the teeth has become widely and generally recognized, and has given rise to a distinct, honorable and numerous profession; departments for the teaching of dental science and surgery have been added to the regularly established schools of medicine and surgery, while numerous special colleges of dentistry have sprung up. Many of the latter, unfortunately, as with similar institutions in other branches of learning, are more of a pretense than a fact; mere *pseudo* establishments with an outward semblance of educational facilities and forms, but in reality but dishonest shams, gotten up to make money by

dispensing for coin and without requirements of learning, pretended certificates and diplomas of graduation, which give the holder an apparent standing and character in his profession to which he is not of right entitled. The evil resulting from this abuse has become so pronounced as to have received very general recognition, and there are now to be found in most of the States statutes intended for its correction.

The statute under consideration is one of these. As expressed in its title, its purpose is "to insure the better education of practitioners of dental surgery, and to regulate the practice of dentistry." It provides a board composed of expert practitioners, with power to examine and license those who have not graduated elsewhere; and to investigate and pass upon the reputability of schools and colleges issuing certificates or diplomas, and the right of the holders of such diplomas to their possession. The powers thus conferred are broad and comprehensive, and in some respects at least must in their nature be final. The judgment of the board, for instance, as to the qualification of an applicant for license by examination, which is largely if not wholly discretionary, must of necessity be conclusive. *Keller vs. Hewitt*, 109 Cal., 146. No one would question this. Is the power to pass upon the reputability of a college, or the right of a holder of a diploma, intended to be less discretionary or final? There is nothing in the language of the act in conferring the power to indicate it. The requirement is to "endorse as satisfactory diplomas from any reputable dental college, when satisfied of the character of such institution, upon the holder furnishing evidence satisfactory to the board of his or her right to the same." This implies quite as necessarily the exercise of judgment and discretion as in the examination of an applicant as to his fitness. It does not direct the board to act upon the presentation of certain specified evidence prescribed by the statute, but it requires the finding of the facts upon which their action is to be based from evidence which is to be "satisfactory to the board." If the statute required that the applicant make a prescribed showing in a particular manner, and that thereupon the board should endorse his certificate, it might with some reason be said that the act was more ministerial than judicial, and that upon the prescribed showing being made the board could not refuse to act. Such a case would be within the doctrine of *Wood vs. Strother*, 76 Cal., 545, and *Stockton Ry. Co. vs. Stockton*, 51 Cal., 328, relied on by respondent, where the action of the tribunal depended upon a certain event, and that event being shown to have in fact occurred, the adverse determination of the tribunal whose duty it was to act was held not so far discretionary as to conclude the question; the true test, as held in *Wood vs. Strother*, being whether the determination of the tribunal "is intended by law to be final."

But here the question, whether those facts which are to move the action of the board have been shown, does not depend upon some specified piece of evidence fixed by the statute, but upon such facts *as will satisfy the board*. The whole question, in other words, as to the facts, is committed to its discretionary judgment, and that its determination in such a case is conclusive and not subject to the mandatory control of the courts, there can be no doubt.

In the present case the tribunal has acted and has determined *against* the petitioner. The allegations that the American College of Dental Surgery "was a reputable college, and there existed and was at the command of defendants sufficient evidence of such fact," and that petitioner furnished "evidence satisfactory to defendants that he was the person named in said diploma," are not the legal equivalent of an allegation that the defendant board have so found. In the language of the court in *People ex rel. vs. Dental Examiners, supra*, on this precise point: "The demurrer here does not admit that the board of dental examiners found that the college at which the relator was graduated was reputable, although it does admit that to be the fact. But, since the board cannot be compelled to decide the question that way, although the evidence might clearly sustain it in so doing, there is no ground for *mandamus*."

It follows that the petition states no cause of action, and the judgment and order must be reversed and the cause remanded, with directions to sustain the demurrer.

It is so ordered.

VAN FLEET, J.

I concur:

HARRISON, J.

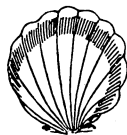
Two

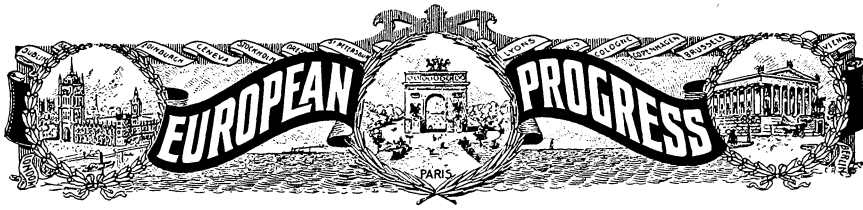
Errors

Corrected.

In the March issue, on page 178, in the caption of an article entitled "A Time Saving Crowning System," the author is described as "J. F. Hovestadt, D. D. S." The doctor has asked that we make a correction, as he is not yet entitled to the degree D.D.S., being an undergraduate at one of the Boston schools. There was no claim to the title in his manuscript, and the error was purely clerical, the doctor being entirely blameless.

Dr. J. C. Bogue, whose article on Pental appeared in our last issue, calls attention to an error on page 249. In the quotation from Dr. Eddy, read: "Pental is *less* likely to produce danger signals," instead of *more*, as it appears in the text.





Submarine Gold Fillings.

By WILLIAM HERBST, D.D.S., Berlin, Germany.

Long before Barnum discovered the rubber dam, we filled teeth with gold under water, notwithstanding the fact that this was always considered unsatisfactory as to results. Thus filling with gold in the presence of moisture is old, but it is new that we may use gold for filling teeth admitting moisture, and obtain perfect results.

The gold which can be used under moisture, is a chemically pure foil, very soft, and of the thickness of the ordinary number sixty foil, but without the unyielding and stiff properties usually found in foils of that thickness. This gold is entirely non-cohesive, when not annealed.



FIG. 1.



FIG. 2.

Cavities Suited to This Method.

The cavities in the approximal surfaces of teeth may be filled under moisture, as well as those in the occlusal surfaces, but the walls must be comparatively strong. Contour fillings, however, as for example, the restoration of the lost corners of incisors and cuspids, are impracticable. Fillings which must have a convex surface when finished, are difficult, and I will publish my experience in this class of work later; for the present, I will only speak of fillings, which I

am positive may be inserted by this method more easily and safely under water, than with the aid of the rubber dam, and which are even more easily introduced than tin-gold fillings.

The instruments required are a tin-gold plugger (Figure 1), a sharp, slightly bent instrument; also a chisel shaped, narrow instrument (Figure 2), and lastly two excavators, one a hatchet and the other a hoe. None of these, however, should be sharp enough to cut or pierce the gold, with the exception of the tin-gold plugger, which should be serrated. The edges of the instruments should be removed with sand paper.

The gold may be picked up on the points of the instruments which may be rubbed on sand paper occasionally to facilitate adhesion. The gold is preferably kept on a wooden plate and moistened with water, which makes the manipulation easier. Care should be taken that the instruments do not become too blunt, which may be obviated by rubbing the sides as well as the cutting edges on the sand paper.

In addition to the instruments named above, we also need a few round stone or steel instruments, to use with the dental engine.

Method of Filling With Gold Under Water.	It would be wise to select for the first experiment, a cavity in the grinding surface of a tooth out of the mouth, by which the value of the method may be tested. The method mainly consists of a system of wedging all the separate pieces of gold along the walls; consequently the points of the instruments should be smooth with the exception of the tin-gold plugger. With the assistance of this last instrument, the cavity is filled with the submarine gold, each layer being condensed with the wedge shaped instruments. In deep cavities, the first layer may be condensed by means of the rotation method, and tin-gold may be used as a base, if desired. It is important that the filling should be made as high as required to extend beyond the margin of the cavity at the point at which the filling is begun, and this rule is followed as the filling is gradually made to approach the opposite wall. All depressions made by the instruments, are to be filled by the addition of gold. The chisel shaped instrument should be forced into the filling, and the space thus made filled by adding more gold, which should be continued until completed.
---	--

Some times it may occur that the gold will not remain in these spaces made by the instrument. The fault usually lies in the fact that the piece used is too large, consequently a smaller piece may be tried, or a depression can be made elsewhere, lateral pressure thus closing the first space, and the second space may be filled with gold. The method is much simplified if the gold, during its introduction, is held in place by an assistant. When the filling is completed, the surface must be perfectly

condensed by means of agate or steel burnishers in the engine, and is then polished.

Fissures in the grinding surfaces of the teeth, are filled with the wedge shaped instrument only. They are packed with gold from the posterior to the anterior portions of the cavity. To complete the filling, the wedge shaped instrument is pressed into the gold near the wall, and the hole thus made is filled with gold again, which process is repeated until the wedge shaped instrument can not be pressed into the filling at any point.

In cavities in the approximal surfaces, great care is needed in the adjustment of the matrix (Herbst's needle matrix, Figure 3), as well as in packing the gold against the cervical margins. These fillings are finished in the same manner as those in the grinding surfaces.



FIG. 3.

**Faulty
Gold Fillings
Readily Repaired.**

Old gold fillings, which, through wear, flaking off or caries, have become defective, may be readily repaired with submarine gold. Even old amalgam fillings, the edges of which have become defective, may be repaired with submarine gold. In such cases, burr out the imperfections along the edges, and the cavities thus formed may be filled as fissure cavities would be, and when completed, the result is most satisfactory.

Dental College in Japan.

Reported by GEORGE RANDORF, Berlin, Germany.

A dental college was founded in Japan in 1891 by Dr. Takamaya. The first lectures were attended by nine pupils, and seven professors were engaged. Thanks to the generosity of its founder the institution has been upheld, and at the present time it is in an exceedingly prosperous condition. During the last five years more than one hundred dentists have been educated in it.

The college contains a library, a reading room, laboratory, operating hall and rooms for the use of the students. The course of study is of

three years duration. During the first year chemistry, materia medica, anatomy, physiology; the second year, mechanical dentistry, pathology and dental surgery, operative dentistry, metallurgy and researches in the laboratory and in bacteriology; the third year comprises the study of dental surgery, examinations with the microscope and further workings in the laboratory. Pupils desirous of being admitted must be over fifteen years of age, and must have received a good education.

Dental Decay as Observed in Wild Animals Whilst in Captivity.

Reported by GEORGE RANDORF, Berlin, Germany.

Drs. Charpentier and P. Stivenim presented an interesting paper before the National Dental Congress of Nancy.

It is well known that the animals are not exempt from decay of the teeth, and Dr. Francis Jean has already reported a case of dental decay of the tusk of an elephant. It would be of great interest to know to what degree this decay exists among wild animals, and they have arrived at the conclusion that captivity tends to increase this decay.

Although its appearance is rare among them, we should imagine it would be still rarer among those at liberty.

In the Natural History Museum at Paris skulls of all animals are preserved, and they examined therein the jaw bones of three thousand specimens. They found as a result of their examination, especially of caries, many anomalies of size, form, extent and number. As animals are never attacked with syphilis they were enabled to decisively conclude that the eroded teeth were not the result of this disease.

Dentology.

Reported by GEORGE RANDORF, Berlin, Germany.

What a wonderful *fin de siecle*. The latest discovery in science is the "future by the teeth." Henceforward a dentist will be looked upon as a prophet; when a man calls upon him to examine his decayed set of teeth, he will give one glance and reveal to his visitor his whole future destiny. This science will be known as Dentology.

The shape of the teeth and the manner in which they are grown very frequently are an index to the character of the individual. The teeth are in this superior to the other features of the face in that they never alter,

except that they decay and fall out. The chief point to be observed is the length of the teeth. Long teeth signify strength of will and power of observation. They also denote marked faults of character. Little teeth, on the contrary, denote weak will and smallness of mind. All celebrated men have had large teeth. This applies to great criminals, also great speculators and learned men.

The position of the teeth is also very important. When they are closely set they indicate bright intellect. When the teeth are protruding and bent forward the owner of them is invariably a simple person. When they are far back in the mouth they denote instability. Pointed teeth signify ferocity and depravity. Very closely set teeth, which are also long, generally accompany an artistic temperament. A man will have but to smile and we shall know his good or bad qualities; the police will be superfluous; in their place the dentist will conduct the examination.

All this nonsense was recently uttered very earnestly by one of our learned men, and it will not be at all surprising to hear of the academy devoting one of its sittings to this question. It merely proves that notwithstanding the advancement of science, charlatanry still prospers. We may expect to see a revival of the old methods of prophecy; for instance, the future foretold by the air, by flour, by the fingers, by arrows, hatchets, mirrors, the earth, the muscles, fire, water, grapes and wood. The somnambulists, who have only playing cards and coffee grounds for their guides, are menaced with a terrible rival. All the ancient tricks will be pushed aside by the modern innovator—the dentologist—the great seer of the future. He who has discovered it should be endowed with a fine jaw bone. The one most suitable would be that of the ass.





The Practice Builder: A Treatise on the Conduct and Enlargement of a Dental Practice.

A Manual of the Business Side of Modern Dentistry, Treating of Everything that Affects the Professional Reputation and Financial Success of a Dentist.

BY CHARLES R. HAMBLY, D.D.S.

American Dental Publishing Co., Cincinnati and New York: 1897.

The Practice Builder is the title of the most unique work which has yet been contributed to the literature of dentistry. It is especially addressed to those in the dental profession, whose success, from a business standpoint, has been only "average or less than average," and it purports to furnish a general map of the pathways to financial prosperity.

Perhaps the best way in which to give succinctly some idea of the scope of this work, will be to quote the titles of the various chapters, which are as follows:—"Dental Education; Dental Legislation; Location; Selection of Outfit; Furnishing the Office; The Elements of Success; The Cause of Failure; The Dentist Himself; Personal Appearance; Introduction to the Public; Partnerships; Associations; Mode of Living; Social Diversion; The Church; Marriage; Banking; The Grades of Material; The Grades of Work; The Laboratory; The Operating Room; Children's Teeth; Gold Work; Plastics; Plate Work; Crown and Bridge Work; Anesthetic Operations; The Medicine Chest; Antiseptic Dentistry; Local Anesthetics; General Anesthetics; Office Business Fittings; The Typewriter and Its Uses in Dentistry; The Dental Journals; The Dental Society; Books; Lady Assistants; Boy Assistants; The Dentist's Home; His Person; Ideas; Classifying Information; Purchasing; Conduct at the Chair; Treatment of Other Dentists; Paying Bills; Honesty; Policy; Tact; Ambition; Confidence; Economy; Emergencies; Accidents in the Office; Recreation; Making Money Outside of Dentistry; Conservatism; Impractical Ideas; Patience; Standing by Work; Influence and How to Get It; Reputation; Wine and Women; How to Become a Specialist; Book-keeping; Handling Patients; Popular Dental Education; Dental

Instructors; The Question of Saving Teeth; Points for Special Study; Duty of Young Men to the Profession; Records; Advertising; The Other Side of Advertising; Printing; Type; Borders; Quotations; Compensation; The Development of Ability; Post-Graduate Study; The Dental Protective Association; Fire, Life and Accident Insurance; Fakirs; The Use and Abuse of Credit; How to Get Patronage; How to Hold Patronage; How to Get New Patrons; Short Sixes; Pellets of Gold; Extracts.

In the chapter on "Dental Education," the author advises the student to waste as little time as possible with a preceptor, unless he pays a fee which will secure for him special instruction, and he further advises that in such case, he should subsequently complete his studies in the school from which his preceptor was graduated.

Of the cities having one hundred thousand and over of population, the young graduate is advised that the worst place in which to begin, statistically considered, is the capital of our country, Washington, where there are but eleven hundred inhabitants to each dentist; Denver and San Francisco come next with fourteen hundred inhabitants to one dentist, and then New York City with sixteen hundred to one; figures which have a reminiscent sound just now. The best location for a beginner, judged from this basis, would seem to be Omaha, where fifty-six hundred persons have teeth to fill for every dentist who is there to fill them; the next best place is Troy, New York, with forty-six hundred inhabitants to each dentist, and then Jersey City, where there are forty-five hundred to one. Thus much can we learn from statistics.

In the chapter devoted to "Dental Legislation," the author makes some well deserved and scathing criticisms of the Dental Law of the State of New York, which would make interesting reading for the Law Committee of the New York State Society.

Speaking of location, some very practical arguments are introduced. The beginner is advised to locate in the smaller towns, or else to form an association with some prominent dentist in a large city, with the distinct understanding that, after three or five years, he shall be at liberty to open a separate office, taking with him all patients who prefer his services. It would seem that such an arrangement would be a solution of the difficult controversies which are constantly arising between the older practitioners and their assistants. It is seldom that the younger man leaves without gaining the ill will of his professional associate, and in the past, many life-long personal antagonisms have thus been originated.

It is, of course, impossible in the space which can be devoted to a review of this work, to give any adequate idea of the contents of a book which deals with the business of a dental practice from ninety different standpoints. All that can be said, therefore, in a general way, is that the

advice offered is, as a whole, excellent, and evidently the result both of experience and judgment. There is, however, one feature of the book so peculiar, that it is impossible to pass it without special notice.

**Treatment of the
Question
of Advertising.**

Almost the first thing in the book, is a copy of the dental code of ethics, as adopted by the American Dental Association in 1866. Thus, it would seem to begin with, that the author would advocate that those entering the dental profession should subscribe to and obey this code, which is supposed to be the standard of professional life, yet curiously enough, a very large portion of the book is devoted to methods of advertising, including even a system of newspaper squibs and puffs to be utilized in the daily press, copy for which is furnished, and the general plan of procuring publication indicated.

This class of advertising however, is restricted to small cities in which the author tells us, "it is permissible to insert in the papers, among professional cards, the announcement of one's having entered the practice of dentistry in the community." In cities of from fifty to one hundred thousand inhabitants, the author believes that the most successful method of introducing one's self into the practice, is by what he calls "the invitation method." By this he means, that the dentist should mail a printed or engraved announcement of the opening of his office to all whom he may desire to reach. A number of such forms of invitation are furnished.

There are also copies for announcements of removal, which he thinks should never be used, except when the dentist actually changes his place of business, and he states that he has known reputable men (?) to make use of this means of attracting attention to themselves, when they have not moved, nor have had any intention of moving.

Later in the work, there is an interesting chapter, covering nearly fifty pages, devoted to advertising, which is freely discussed, many examples being given of the class of advertising which is now indulged in, and which is commonly seen in the newspapers and elsewhere. Then there is a brief chapter discussing the other side of advertising; both of which chapters would prove entertaining whether the reader be quack or professional.

It is questionable whether the author has been wise, in a book which he must hope to sell to the profession at large, of which undoubtedly more than ninety per cent. aim to be professional men, to devote so great an amount of space to this subject of advertising, which is the bug-a-boo of the professional man. From the general trend of the book, however, it is but fair to state that it seems to have been his idea to recognize the fact that some men enter the dental profession who have none but commercial instincts. These men will advertise in spite of any or all codes of

ethics, and these men in their selfish race for money, overlook the fact that whilst they may succeed in gaining financial results by their questionable methods, at the same time, they cast a stigma upon a learned and respectable profession, and if *The Practice Builder* can induce these men to modify their present outrageous modes of advertising, so as to conform to some of the milder schemes promulgated in this work, perhaps after all, a great good would have been gained. The danger is, however, that where one quack may be made a little more professional by making himself a little less conspicuous, it is possible that ten young graduates may become quacks through the idea advanced, that advertising attracts practice.

The book, itself, is a model of modern methods of printing, the paper, the type and the binding being unquestionably the finest which has been seen in any dental publication.

Compend of Dental Pathology and Therapeutics.

By HENRY H. BURCHARD, M.D., D.D.S.,

Special Lecturer Upon Dental Pathology and Therapeutics, Philadelphia Dental College, Philadelphia.

Publishers—The S. S. WHITE DENTAL MFG. CO., 1896.

This little book evidently prepared originally for the students of the Philadelphia Dental College is presented to the public with a view to aid students in general. As a rule, it may be stated that the value of a quiz book is questionable. There is always afforded to the mediocre student an opportunity to cram a condensed mass of statements which, too frequently, are memorized in a parrot like form.

If any work can be made an exception to this objection, it is this book of Dr. Burchard's. No higher praise can be given than to say that it is up to date from the first to the last page. It is a systematic, succinct and scholarly production. To the real student, its value is unquestioned, even though it may become a temptation to those whose sole efforts are concentrated in obtaining their degree with the least amount of study.

It has, however, another field of usefulness which should not be overlooked.

Every teacher in a dental school will find the little volume of inestimable value, and this alone warrants its publication.

A Practical Treatise on Artificial Crown and Bridge Work.

BY GEORGE EVANS, D.D.S.

*Lecturer on Crown and Bridge Work in the Baltimore College of Dental Surgery;
Member of the American Dental Association; of the Southern Dental Association;
of the Dental Society of the State of New York; of the
First District Dental Society of the State of New York;
Honorary Member of the Maryland State
Dental Association, Etc.*

Fifth Edition, Revised, with Six Hundred and Twenty-five Illustrations.

Philadelphia: Publishers—THE S. S. WHITE DENTAL MFG. CO., 1896.

We are presented with the fifth edition of a work which, when it appeared originally in 1888, was of considerable value as it then gave a fair presentation of crown and bridge work up to that time. Since then four more revised editions have appeared, but in their revision has the author kept abreast of the advances that have been made in crown and bridge work?

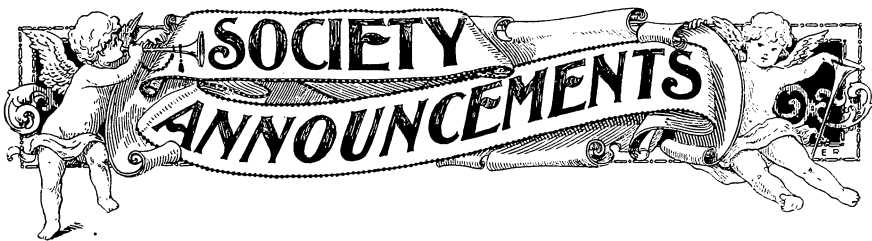
Some time ago we deprecated the production of a new edition of a valuable work unless the author should give each new edition the same care and work which established the reputation of the primary edition.

Too frequently the exhaustion of the volumes in print is the sole cause for the new edition which, in order to make it revised, is increased in size by a few pages and illustrations.

This is the general criticism that must be made of the fifth edition of this work. It shows a great lack of attention to radical improvements; and the revision appears to be more of an elaboration of what has already been published by the author, than to include any history of what has been newly introduced to the profession.

Bridge work of any considerable extent is tending more every day to what is known as the removable or detachable form, because the profession is beginning to see how fixed bridges shorten the lives of the teeth used for abutments.

Still Dr. Evans refrains from describing any newer forms of removable bridge work, although one evolving entirely new principles, was described by Drs. Rhein and Andrews, before the First District Dental Society, to whom this volume is dedicated. There is no excuse for the absence of any mention of a method for placing a gold cap over a tooth having a living pulp, without grinding any portion of the tooth, except for obtaining proper occlusion, at whatever angle the tooth may be situated.



American Dental Association.

ANNUAL MEETING.

The American Dental Association will hold its next meeting at Old Point Comfort, Va., Tuesday, August 3rd, 1897. This will, probably, be the most important meeting of the American Dental Association held in years, as it is expected that the entire question of reorganization will be presented for settlement. It is, therefore, earnestly desired that each organization in affiliation with the American will make a responsive effort to have a full delegation present at Old Point Comfort, and have this representative body instructed in regard to the position held by your society in relation to this question.

It is further suggested that each society should devote at least one evening to the discussion of the question: Whether a change in the relations of the two so-called national bodies, the American Dental Association and the Southern Dental Association, be desirable? In this way thought may be crystalized and each delegate be prepared to meet the subject with the intelligence its importance demands.

Each State and local society which has adopted substantially the same code of ethics as that governing the conduct of members of the American Dental Association is entitled to one representative for every five members and fractional part thereof.

Blank certificates for delegates may be had on application to the corresponding secretary.

By order of the president, Dr. James Truman.

EMMA EAMES CHASE,
Corresponding Secretary American Dental Association.

Pacific Coast Dental Congress.

SAN FRANCISCO, CALIFORNIA.

To be held July 13, 14, 15, 16.

Reported by CLYDE S. PAYNE, D.D.S., San Francisco, Cal.

At a special meeting of the General Committee of the Pacific Coast Dental Congress, held at the office of Dr. Walter F. Lewis, Oakland, Cal., on Wednesday evening, March 24th, it was decided that the Congress should be held in the month of July instead of August, as previously announced, beginning on Tuesday, July 13th, and continuing four days. Vice-Chairman Dr. W. F. Lewis presided over the meeting in the absence of Chairman Dr. C. L. Goddard, at present in the East.

The following were present: Drs. W. F. Lewis, L. Van Orden, W. A. Knowles, W. Z. King, H. D. Boyes, F. M. Hackett, G. N. Van Orden, L. A. Teague, A. Cane, Warren De Crow and R. W. Meek, Secretary.

After the reading of the minutes of the preceding meeting, the By-Laws were amended to conform to the change of date. In accordance with the By-Laws, the officers of the Congress were elected by ballot. All the members of the General Committee were entitled to a vote, and the nominations made by the General Committee were submitted in ballot form on "reply postal cards." It had been previously decided that the nominations should be made outside of San Francisco and Oakland. The returned ballots resulted in the election of Dr. Sumner J. Barber, of Portland, Oregon, President; Dr. A. Scott Chapman, of Salt Lake City, Vice-President; Dr. W. R. Bird, of Los Angeles, Cal., Secretary. A letter of acceptance from Dr. Barber was received, stating his intention to be present at the Congress. Dr. Chapman has as yet made no acknowledgment of his election, and Dr. Bird sent his resignation on account of his inability to attend. The vacancy caused by Dr. Bird's resignation as Secretary, was filled by the election of Dr. R. W. Meek, of Oakland, Cal., the present Secretary of the Committee. The selection of Dr. Meek is a happy one, and a well deserved compliment to him. The reports of the Chairmen of the various Committees were received, all of whom reported favorable progress.

By the change in the date, the Congress will be held during the meeting of the "Christian Endeavor Association" in this city, at which time the railroad rates will be materially reduced, and it is anticipated that a much larger attendance at the Congress will be the result. The Committees are working indefatigably, and their efforts should result in the success of the meeting.

An effort will be made to bring some of the leading members of the profession in the East to the Coast, and the desire of the Committee is to present some features in the practical part of the program in the way of clinics on Oral Surgery and on Cataphoresis. The Chairman of the Committee on Operative Clinics, Dr. Russell H. Cool, is a known worker and an interesting, scientific and instructive program of clinics may be expected. He will be assisted by Drs. Clyde S. Payne, W. G. Wallace, A. M. Barker and M. W. Levkovitz. Dr. W. F. Sharp, who so ably conducted the clinics of the Midwinter Fair Dental Congress, is at the head of the Committee on Prosthetic Clinics. Dr. F. L. Platt, the Chairman of the Program Committee, is well fitted for its arduous duties. He has fourteen assistants. Dr. C. E. Post is in charge of Local Arrangements, with two assistants. Dr. W. Z. King is well placed, presiding over that most trying and thankless Committee, Membership. Drs. Barber, Hachett, De Crow, Metcalf, Townsend and Parsons will deliberate with him. Dr. H. D. Boyes is at the head of the Committee of Exhibits, and has five assistants. The Reception Committee has thirteen co-workers. Dr. L. A. Teague, Chairman of the Committee of Transportation, is assisted by Drs. Carlton and Merriman. Dr. J. D. Hodgen is well fitted for the Chairmanship of the Publication Committee and Dr. W. A. Knowles as his assistant. The Auditing Committee has Dr. Thos. Morffew as its Chairman, with Drs. S. E. Knowles and A. H. Millbery assisting.

Concluding there is the Executive Committee with Dr. Walter F. Lewis, Chairman, Drs. F. C. Pague, F. W. Bliss, T. N. Iglehart and W. Z. King.

The outlook for the Congress is most encouraging, and it is pre-saged that the meeting will eclipse the Midwinter Fair Dental Congress from every standpoint.

Maryland State Dental Association.

A tri-union meeting of the "Washington City Dental Society," the "Maryland State Dental Association" and the "Virginia State Dental Association" will be held at Old Point Comfort, Va., on Thursday, Friday and Saturday, 6th, 7th and 8th of May, 1897.

A special feature of this meeting will be the presence of a large number of clinicians, who will practically demonstrate the latest theories of advanced dentistry.

A cordial invitation is extended to all progressive dentists.

F. F. DREW, Secretary,
701 N. Howard street,
Baltimore, Md.

South Dakota State Dental Society.

The books and papers belonging to the North Dakota State Dental Society were destroyed in a fire which consumed the office of the Secretary, Dr. Wm. G. Ashton, at Milbank, South Dakota, February 23d. All records being lost, will every member of the Society send his name, address and date of admission to the Society, to the Secretary as soon as possible. Anything regarding the history of the Society will be thankfully received. Other journals please copy.

W. O. ROBINSON,
President.

The annual meeting of the South Dakota Dental Society will be held at Vermilion on June 2, 3 and 4, 1897. Dentists residing in other States are cordially invited to attend. Programme will be sent to you by addressing,

W. O. ROBINSON, President,
Parker, S. D.

WM. G. ASHTON, Secretary,
Milbank, S. D.

Michigan Dental Association.

The annual meeting of the Michigan Dental Association will be held at Owensboro, Ky., June 17.

HENRY C. RAYMOND, Sec'y,
Detroit, Mich.

Kentucky State Dental Association.

The Kentucky State Dental Association will hold its next annual meeting at Owensboro, Ky., June 22, 23 and 24.

The State Board of Examiners will meet at same time and place.

For information address the secretary,

J. H. BALDWIN, D. D. S.,
307 West Broadway, Louisville, Ky.

Oklahoma Dental Association.

The next regular meeting of the Oklahoma Dental Association will be held in Oklahoma City, on May 4th, 1897.

E. E. KIRKPATRICK,
Secretary.